

Figure 1

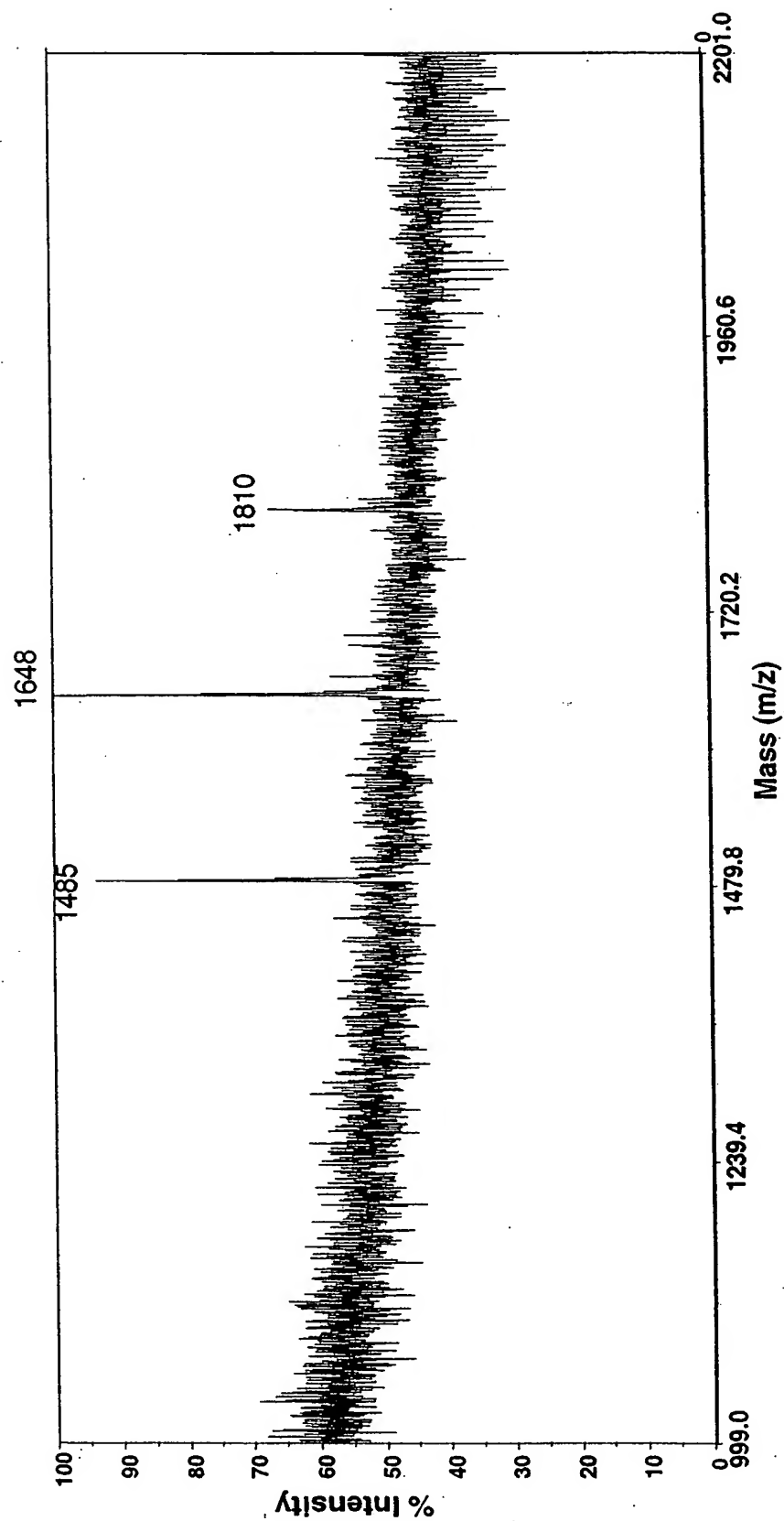


Figure 2

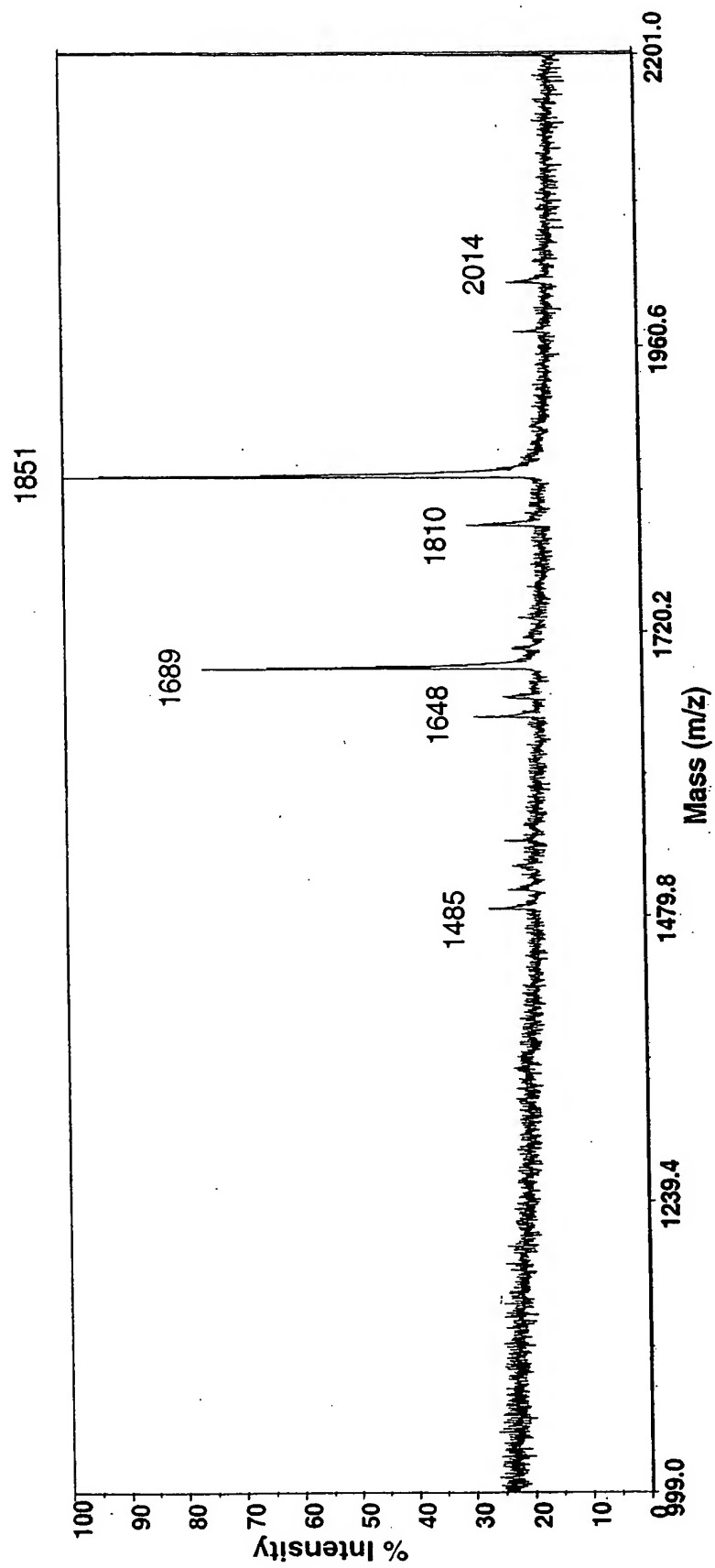


Figure 3

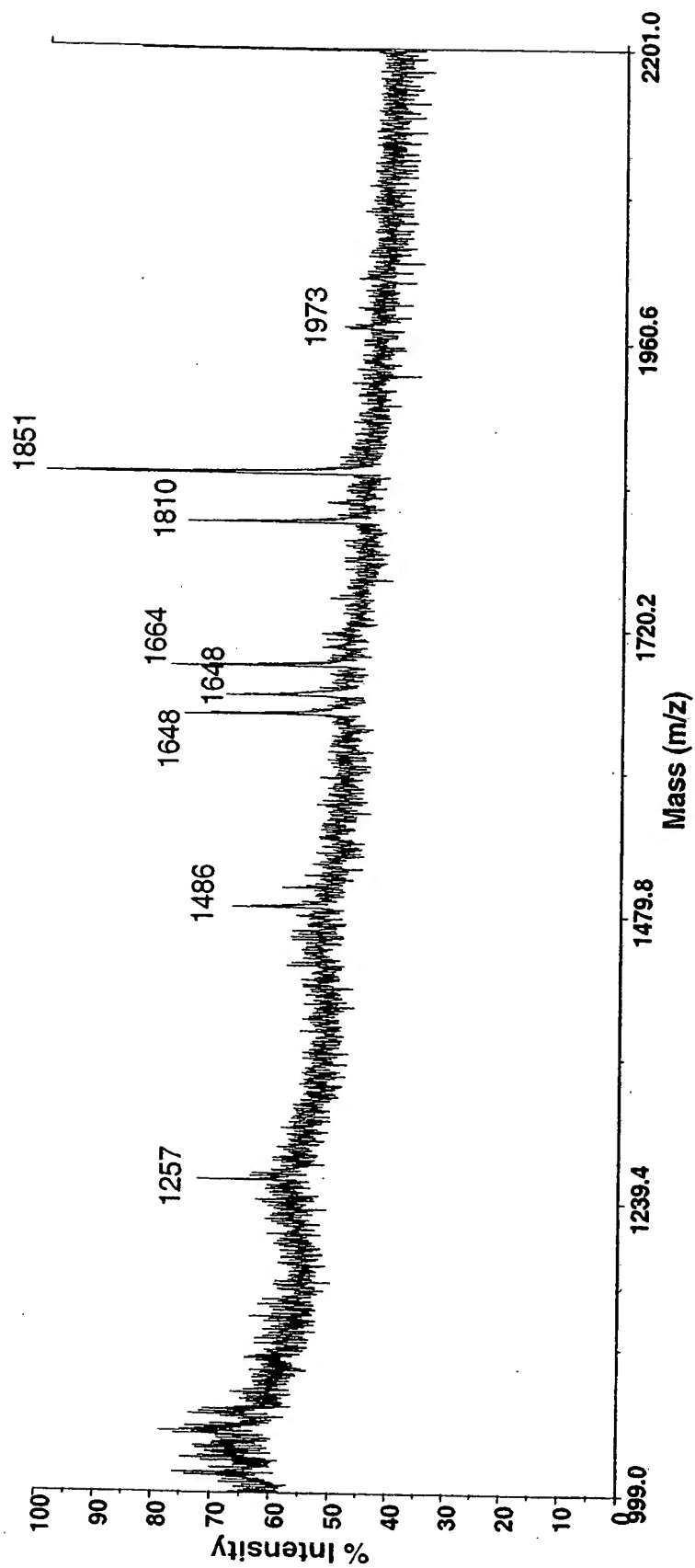


Figure 4

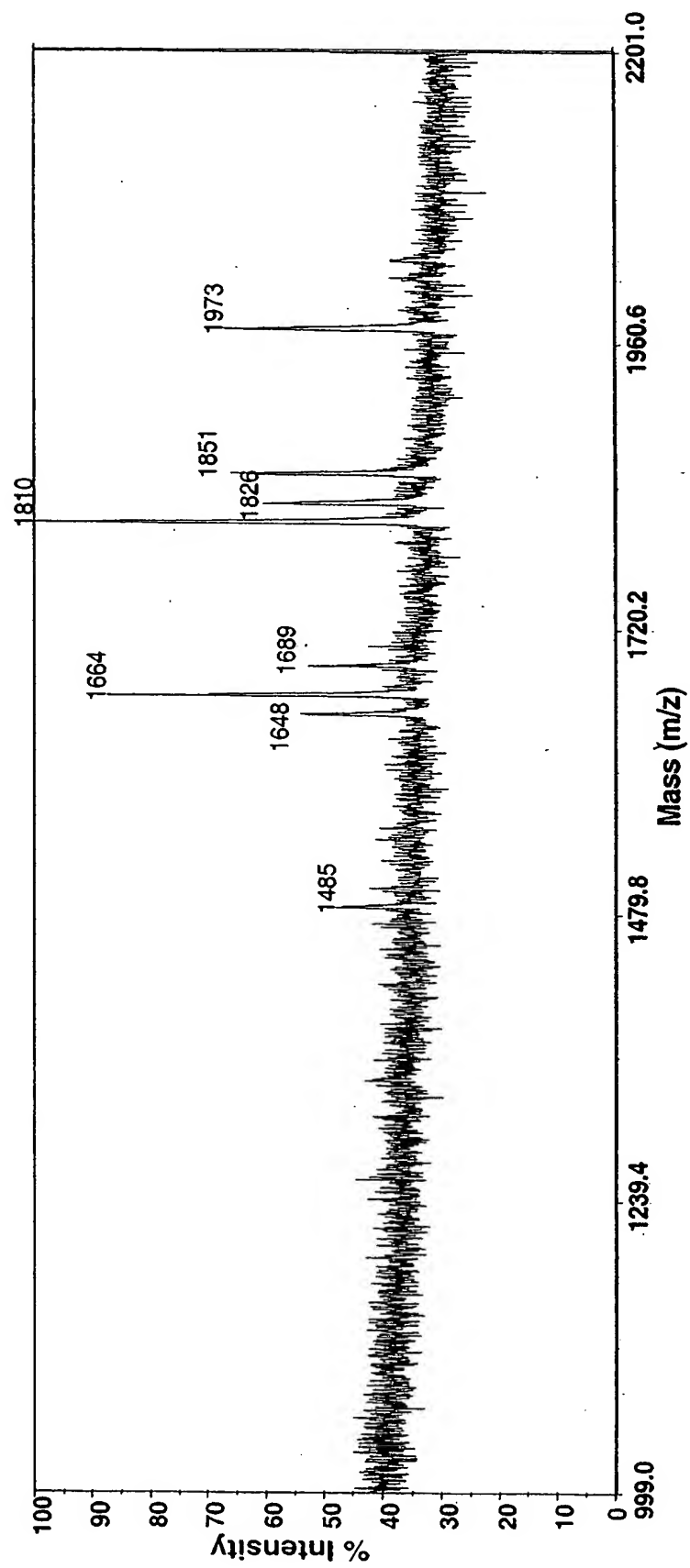


Figure 5

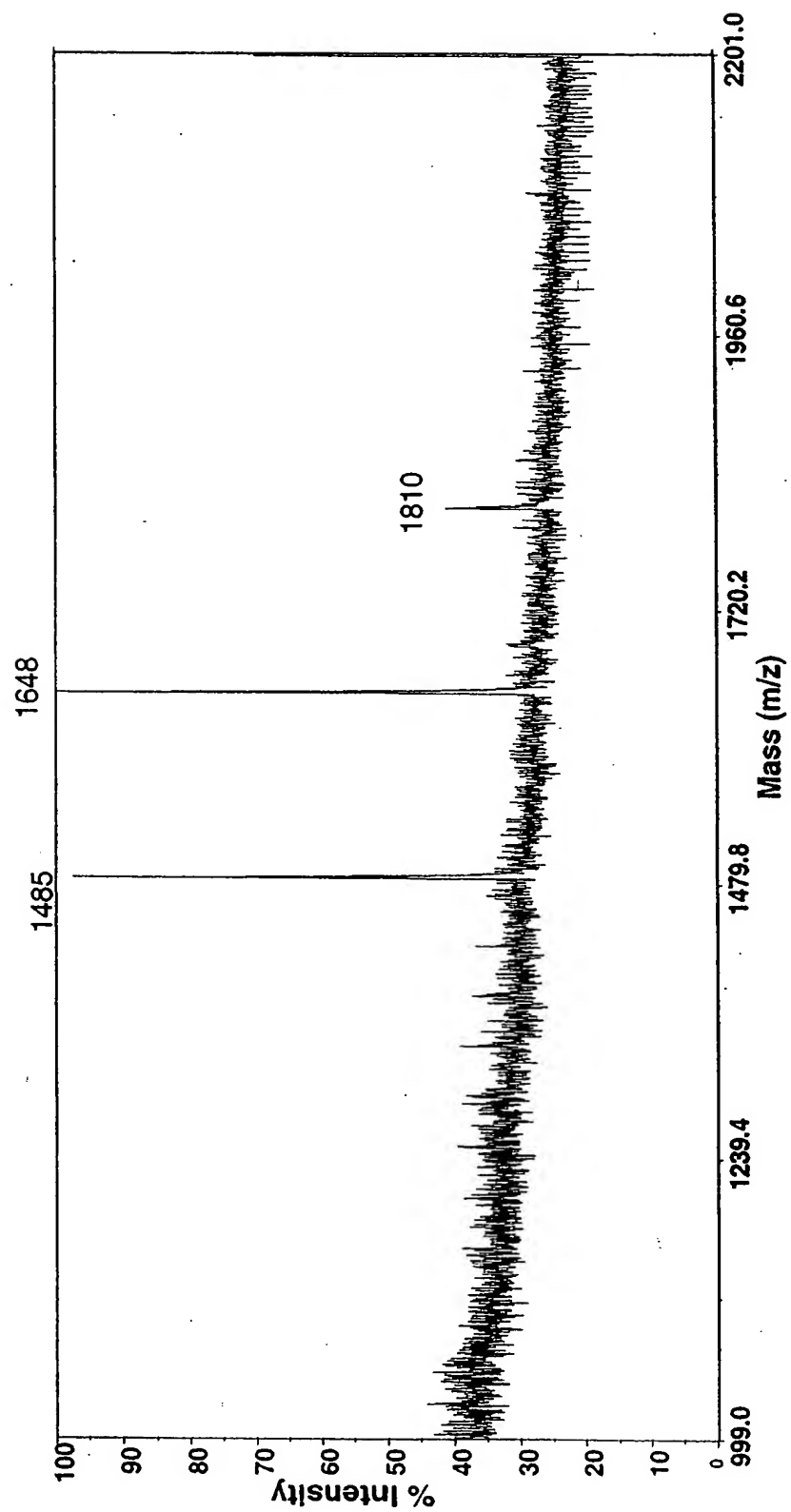


Figure 6

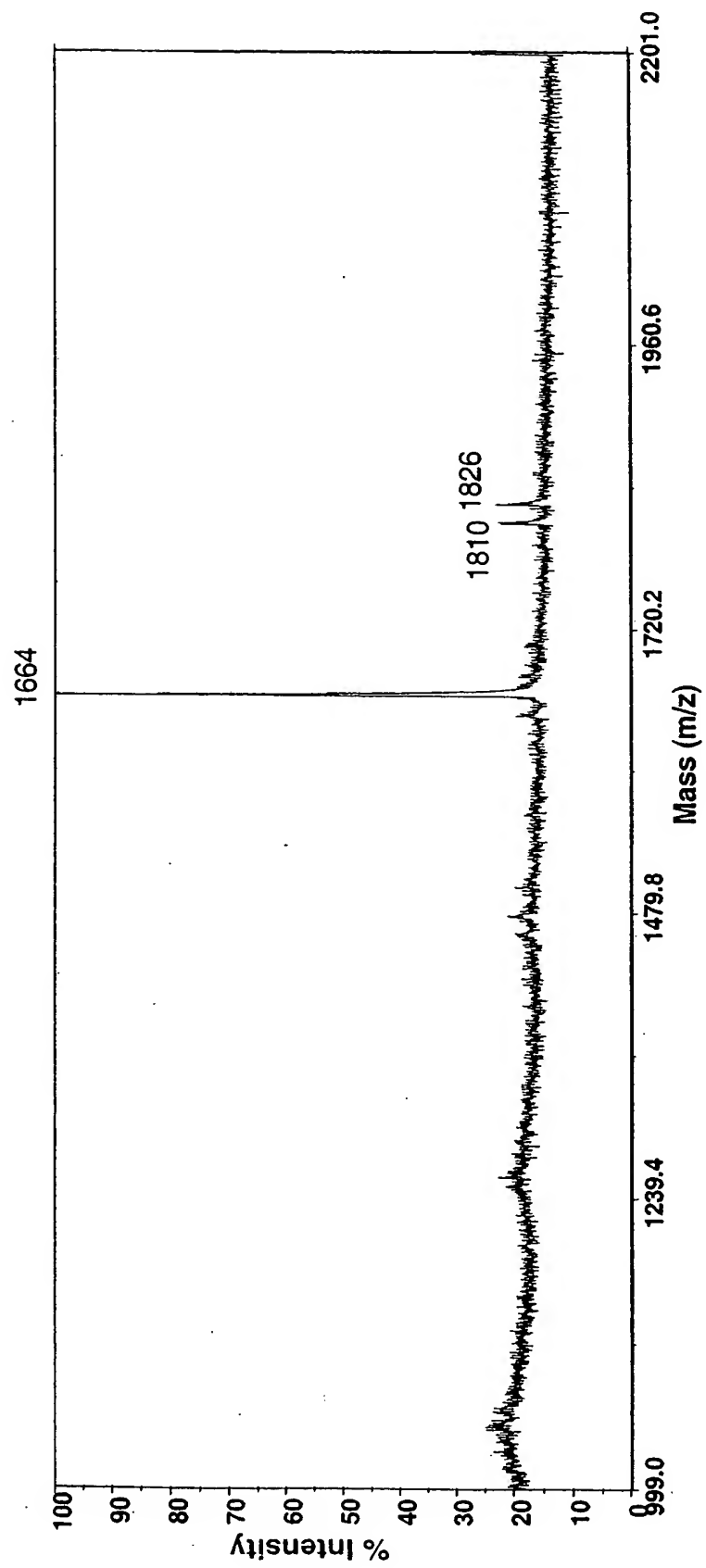
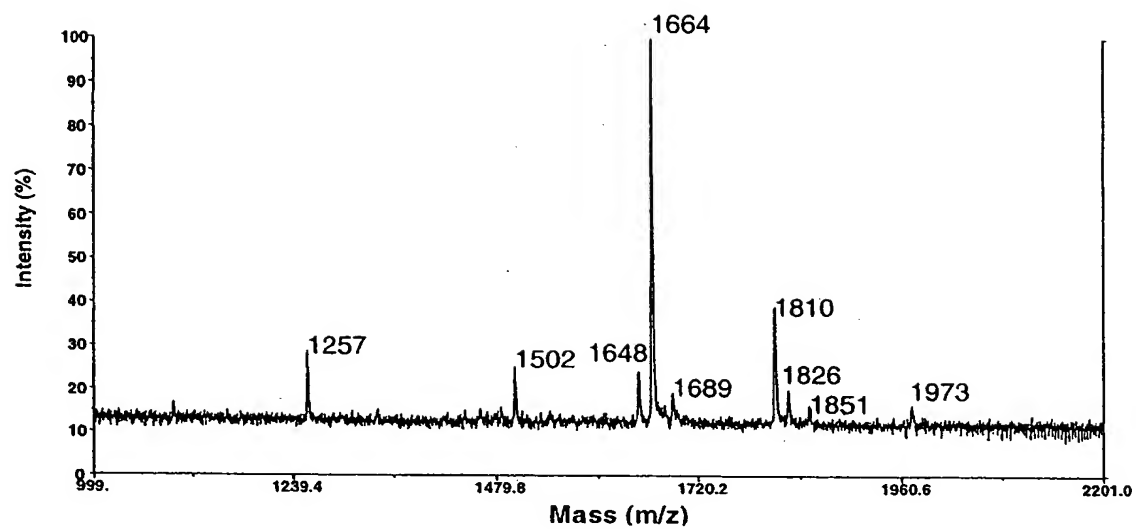


Figure 7

(a)



(b)

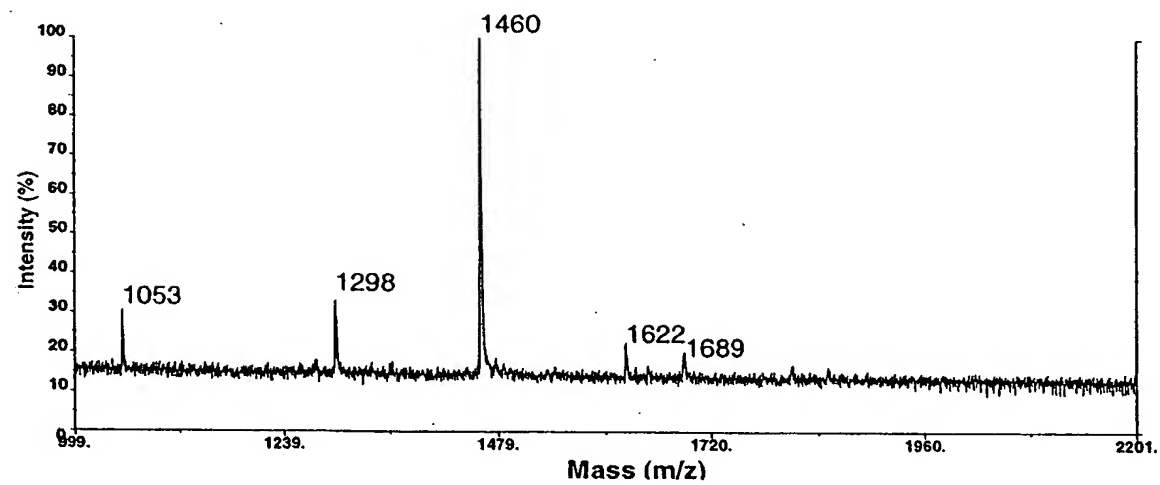


Figure 8

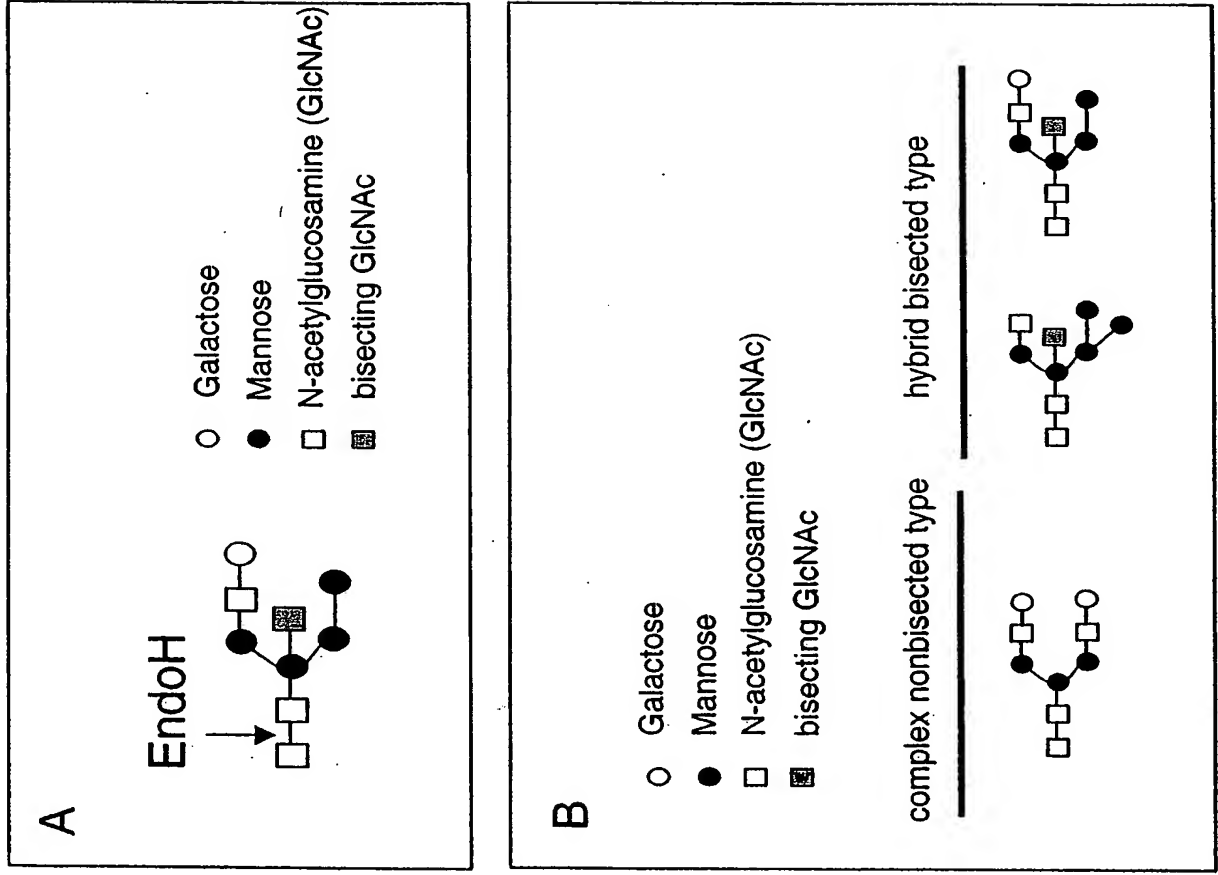


Figure 9

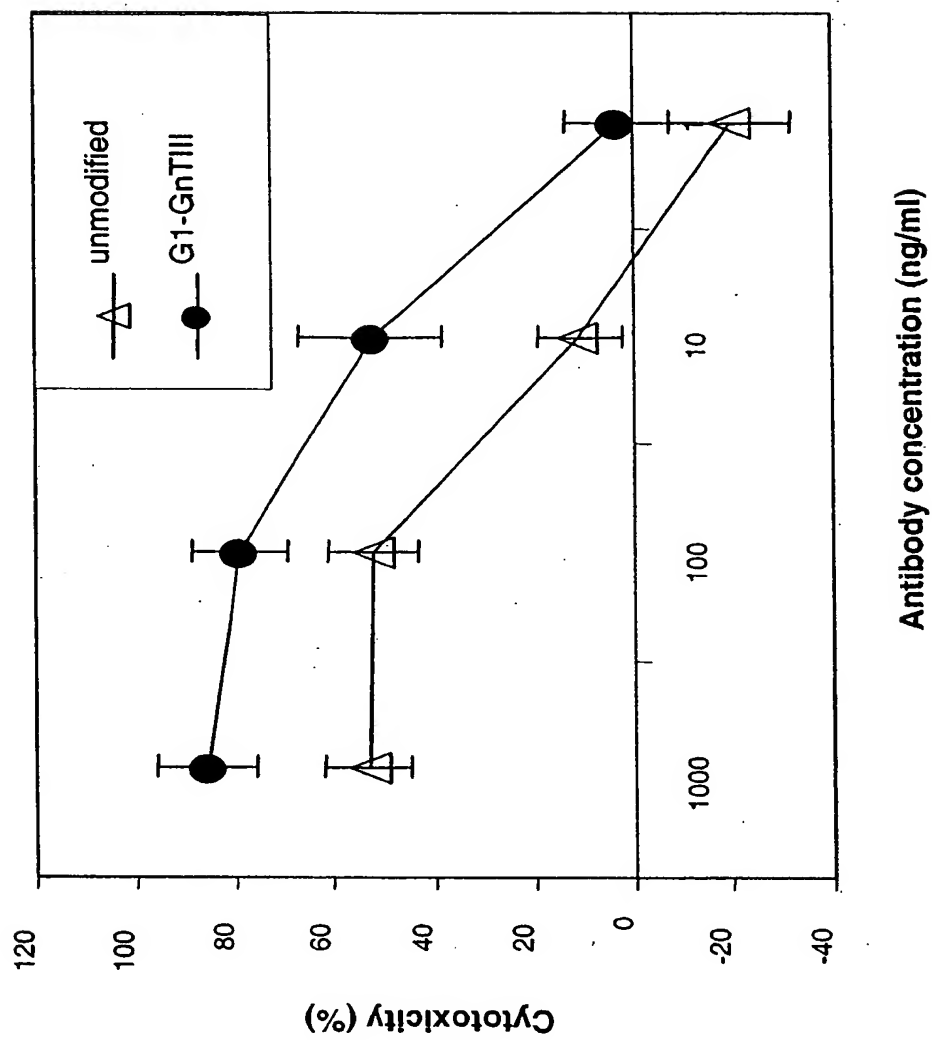


Figure 10

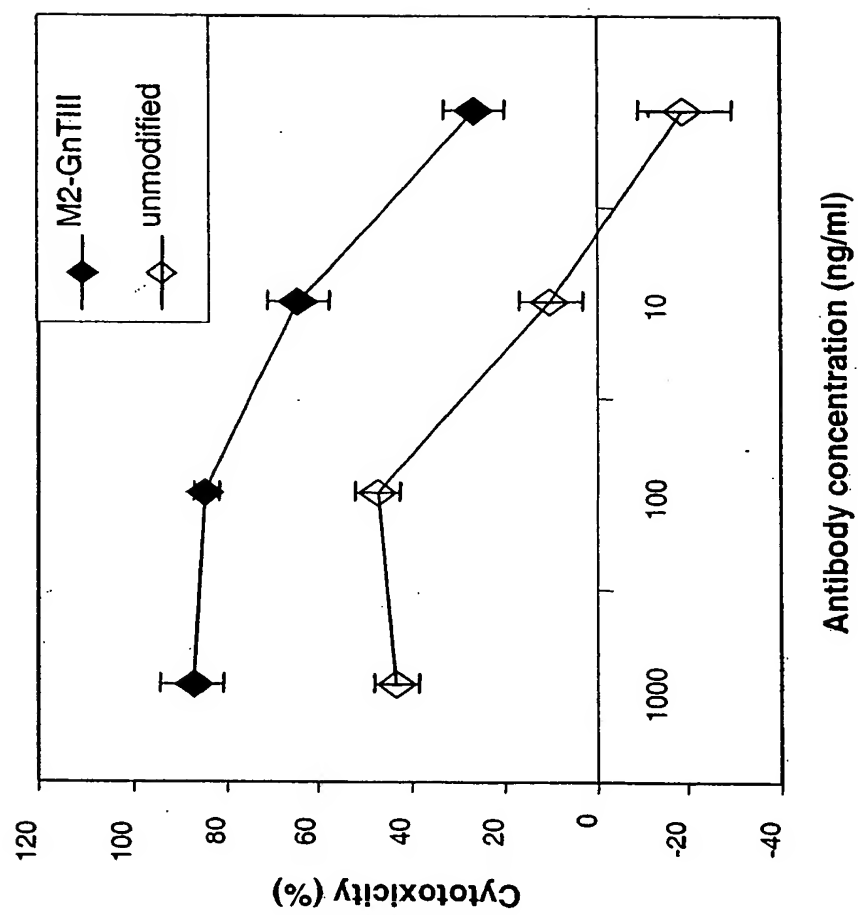


Figure 11

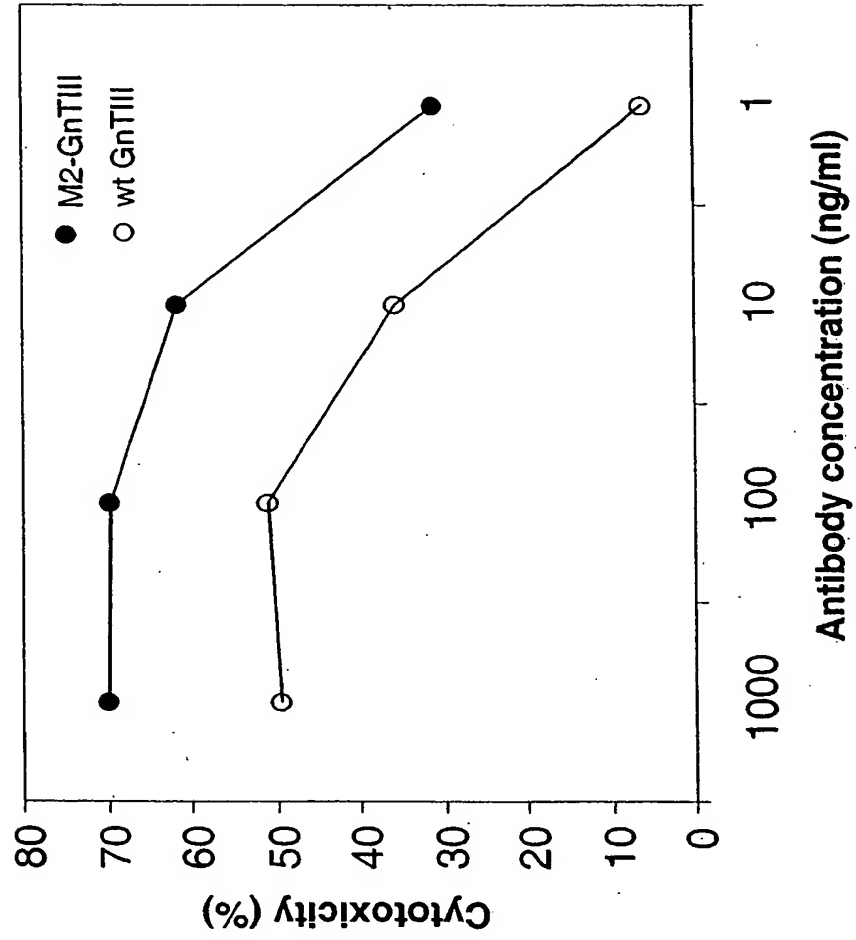


Figure 12

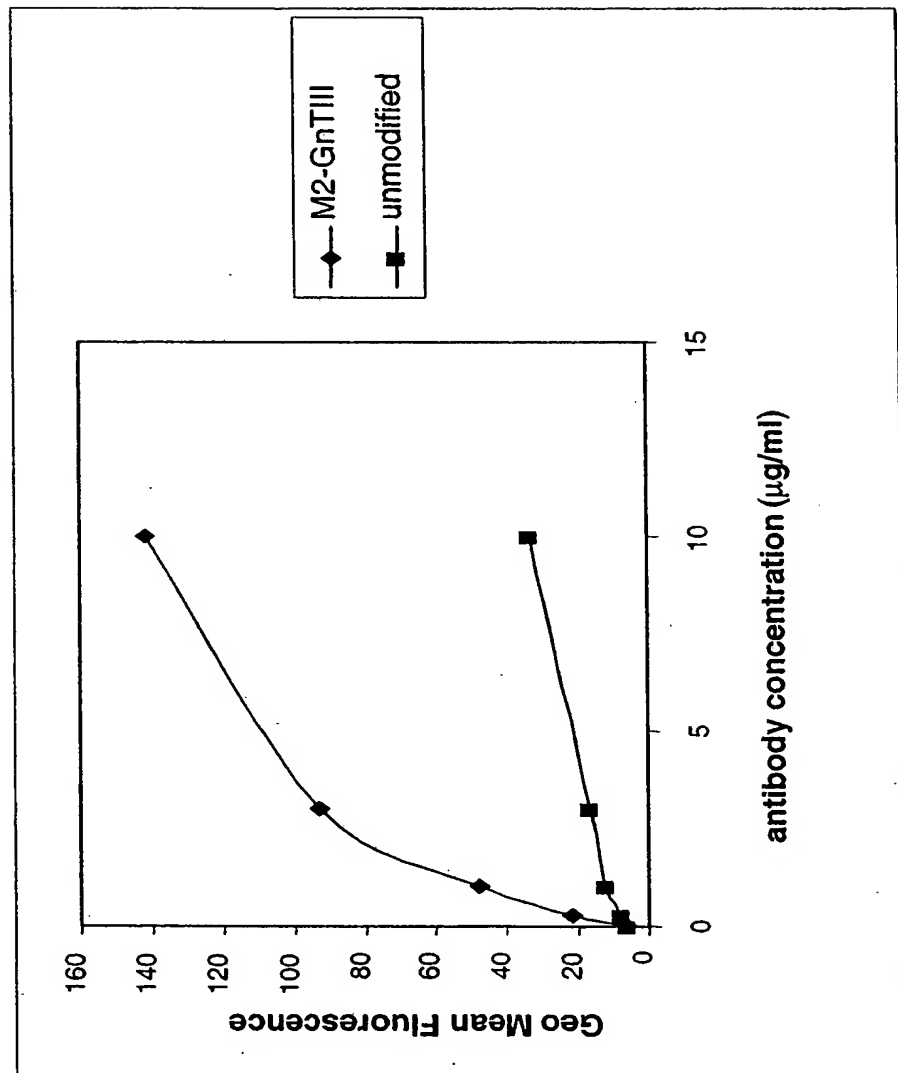


Figure 13

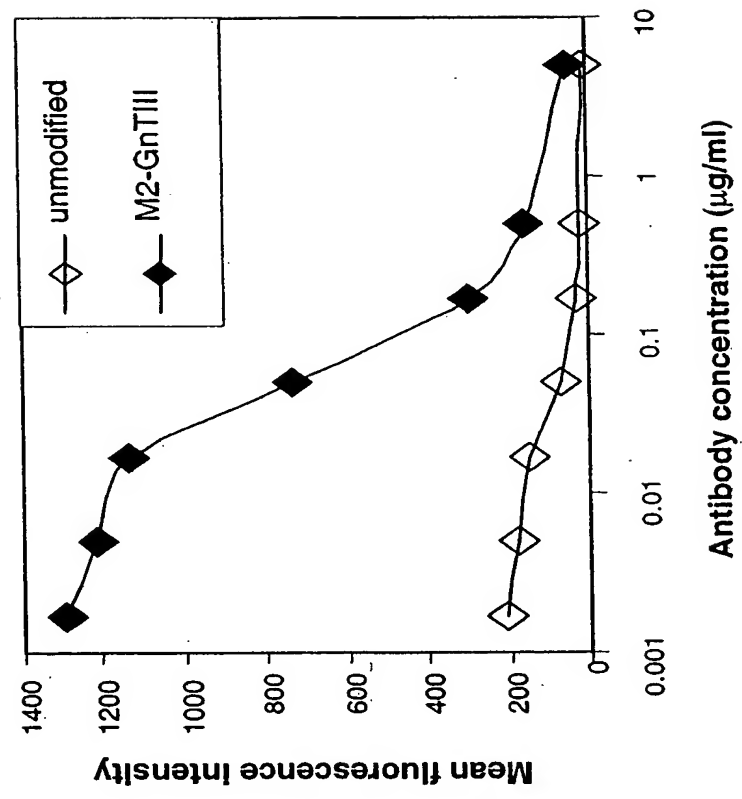


Figure 14

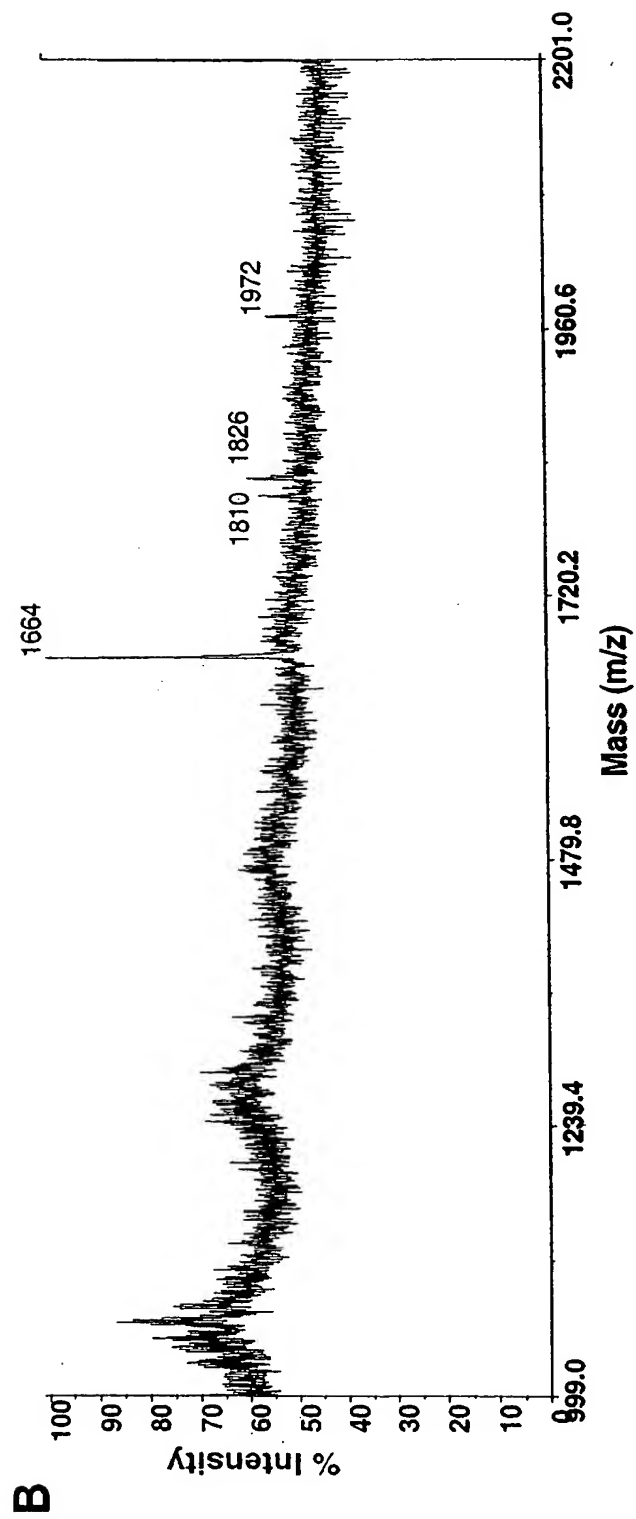
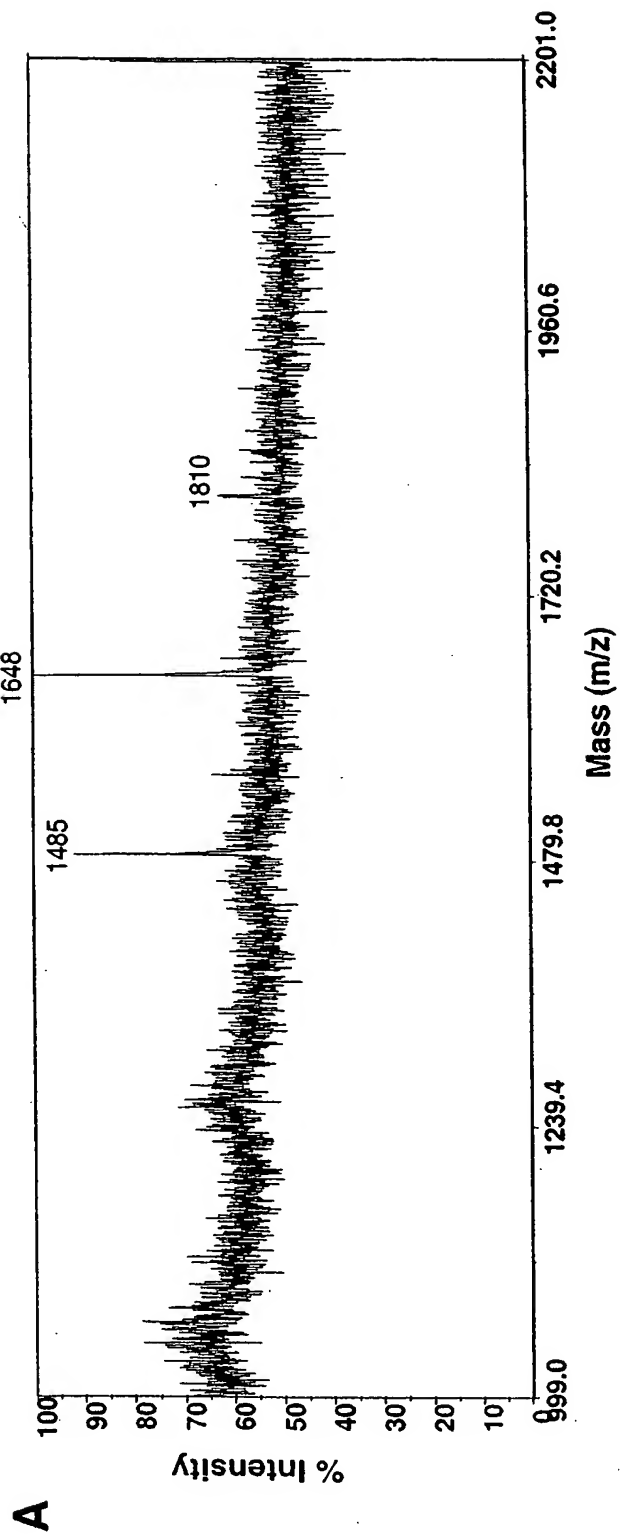


Figure 15

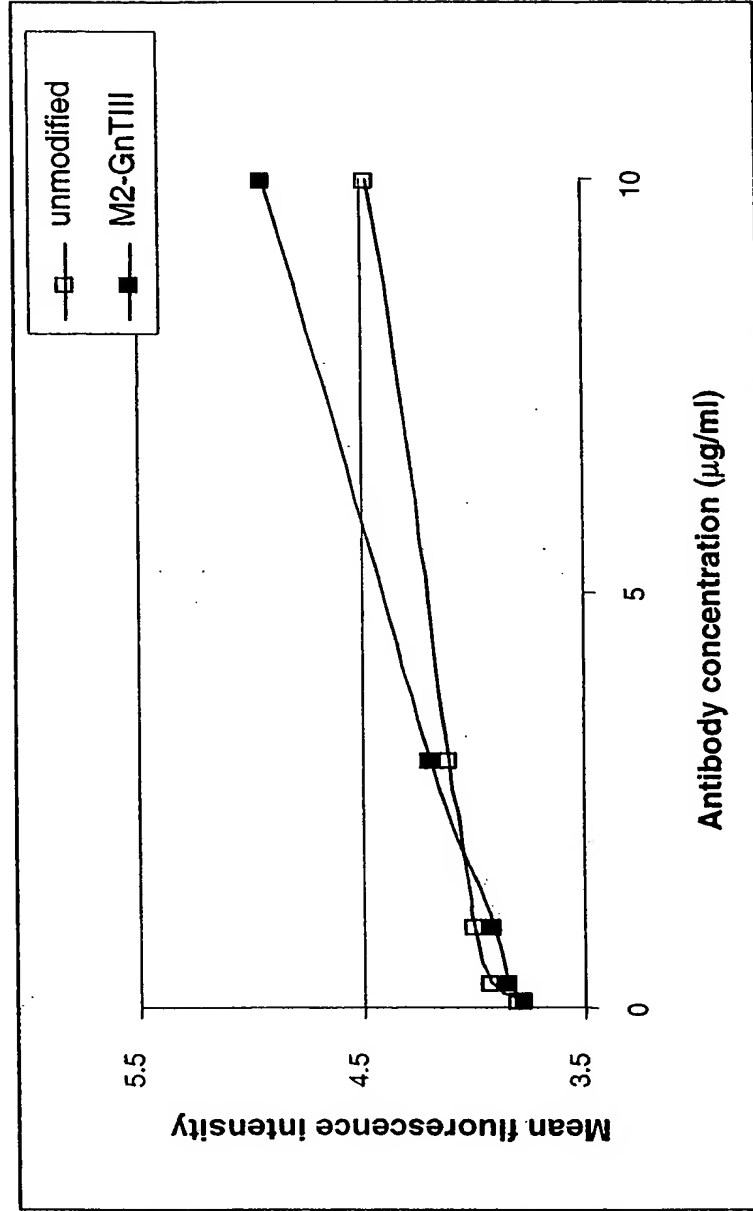


Figure 16

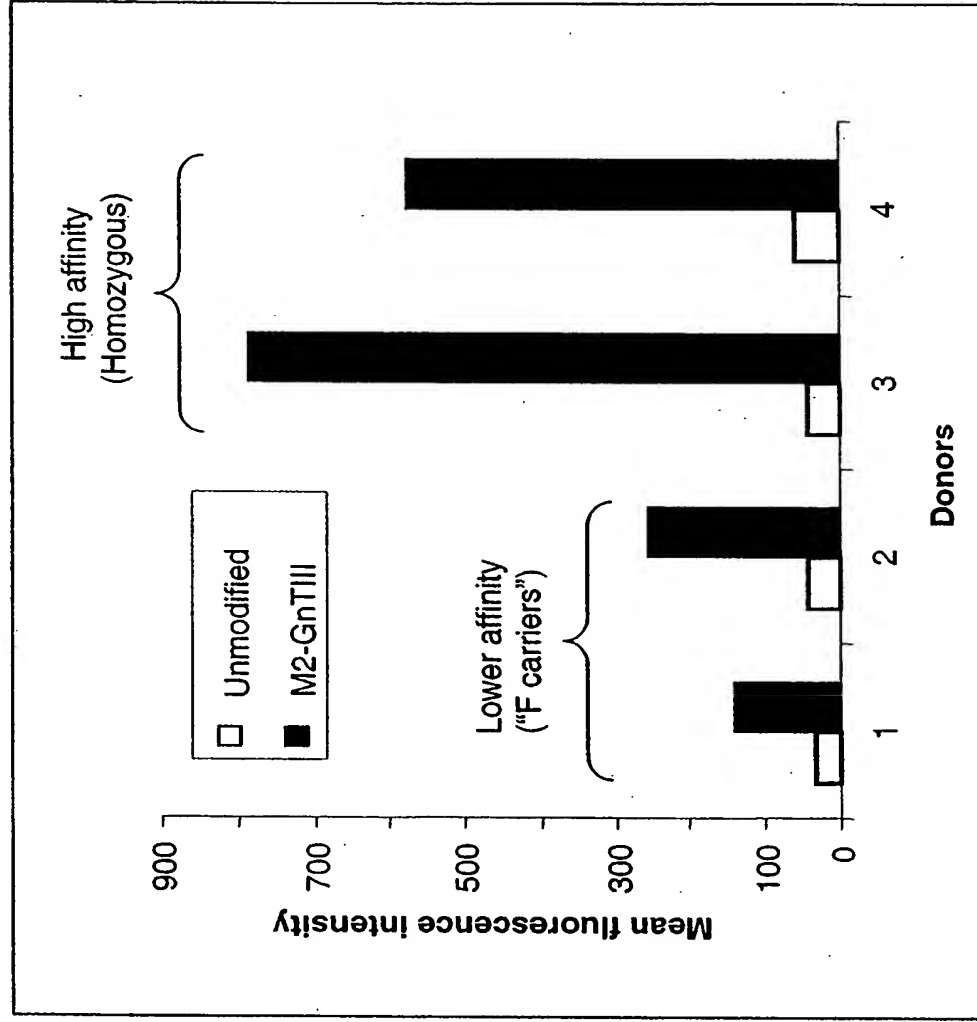


Figure 17

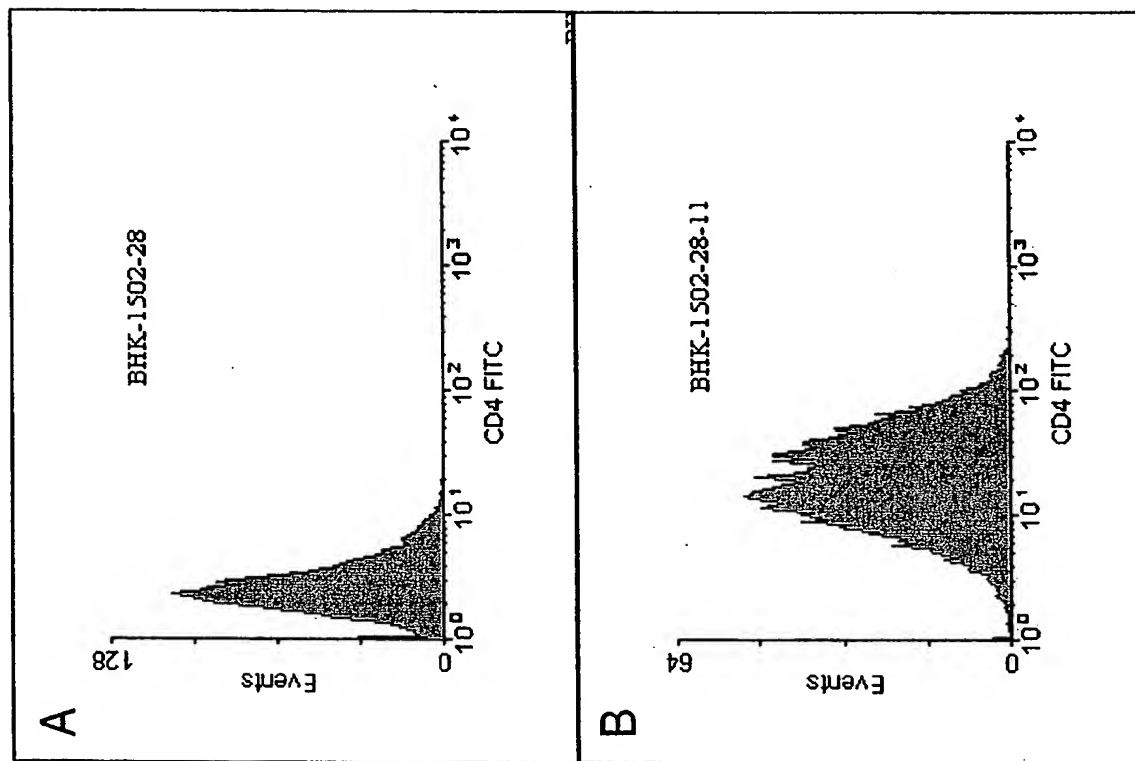


Figure 18

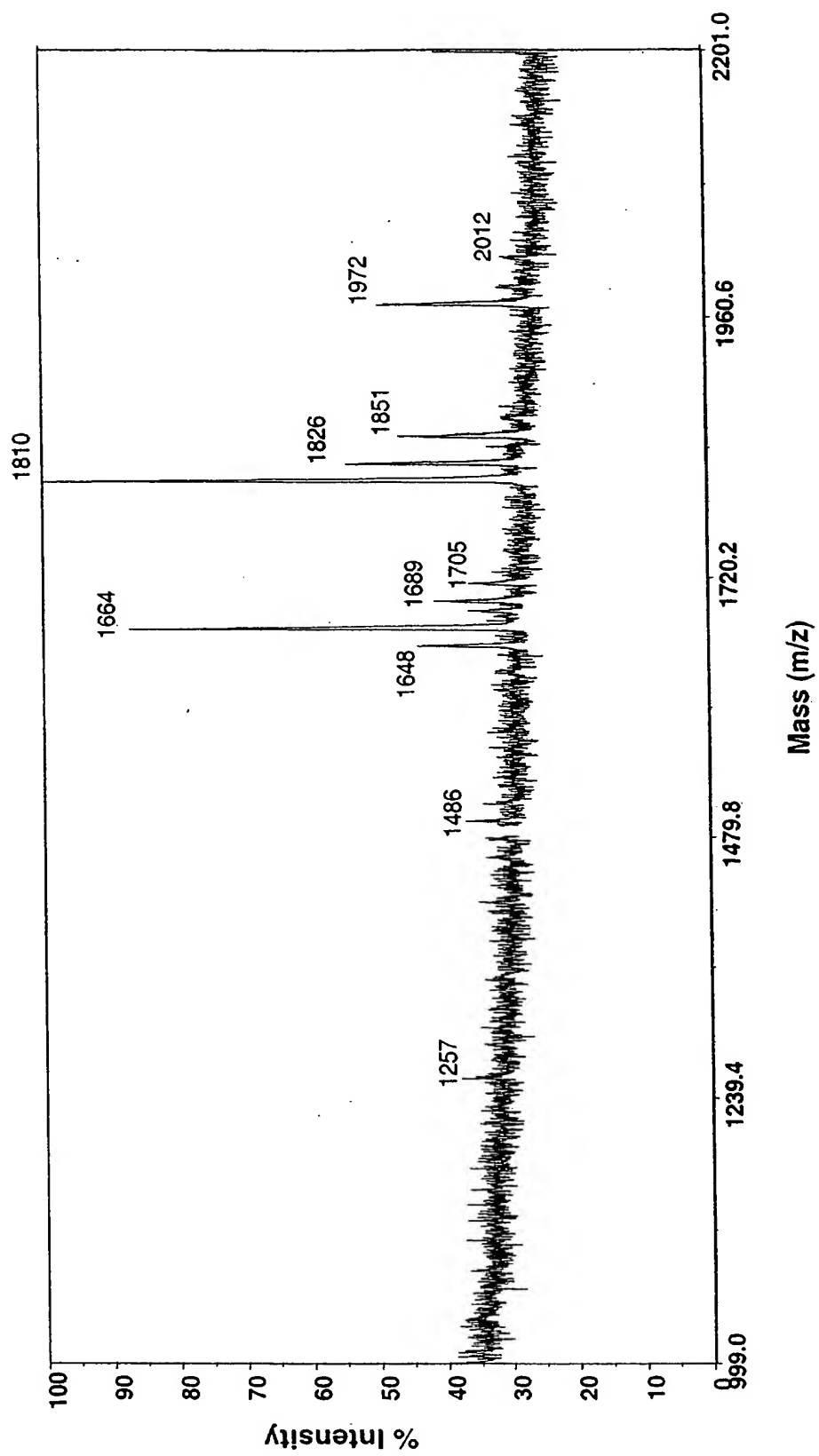


Figure 19

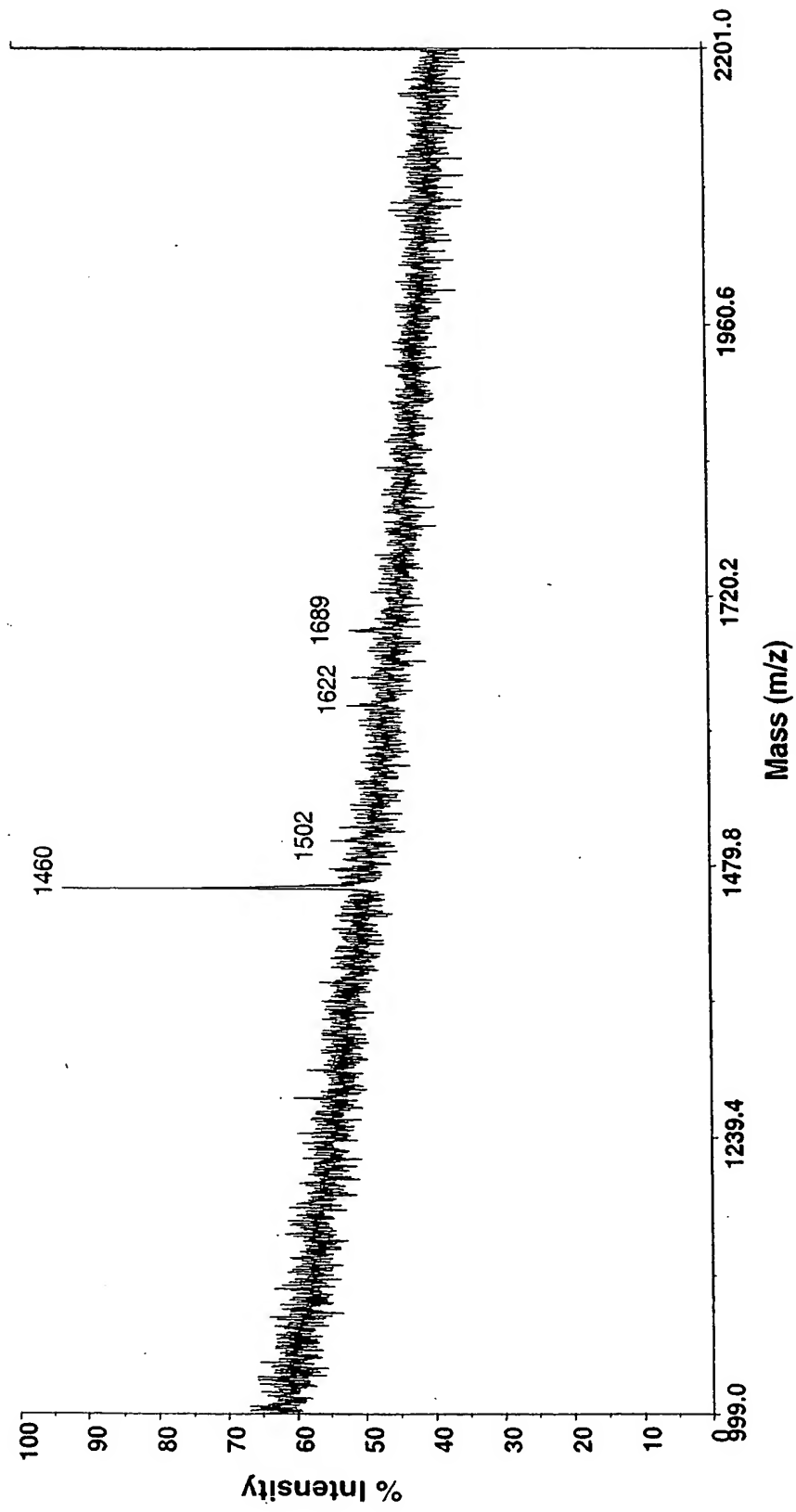


Figure 20

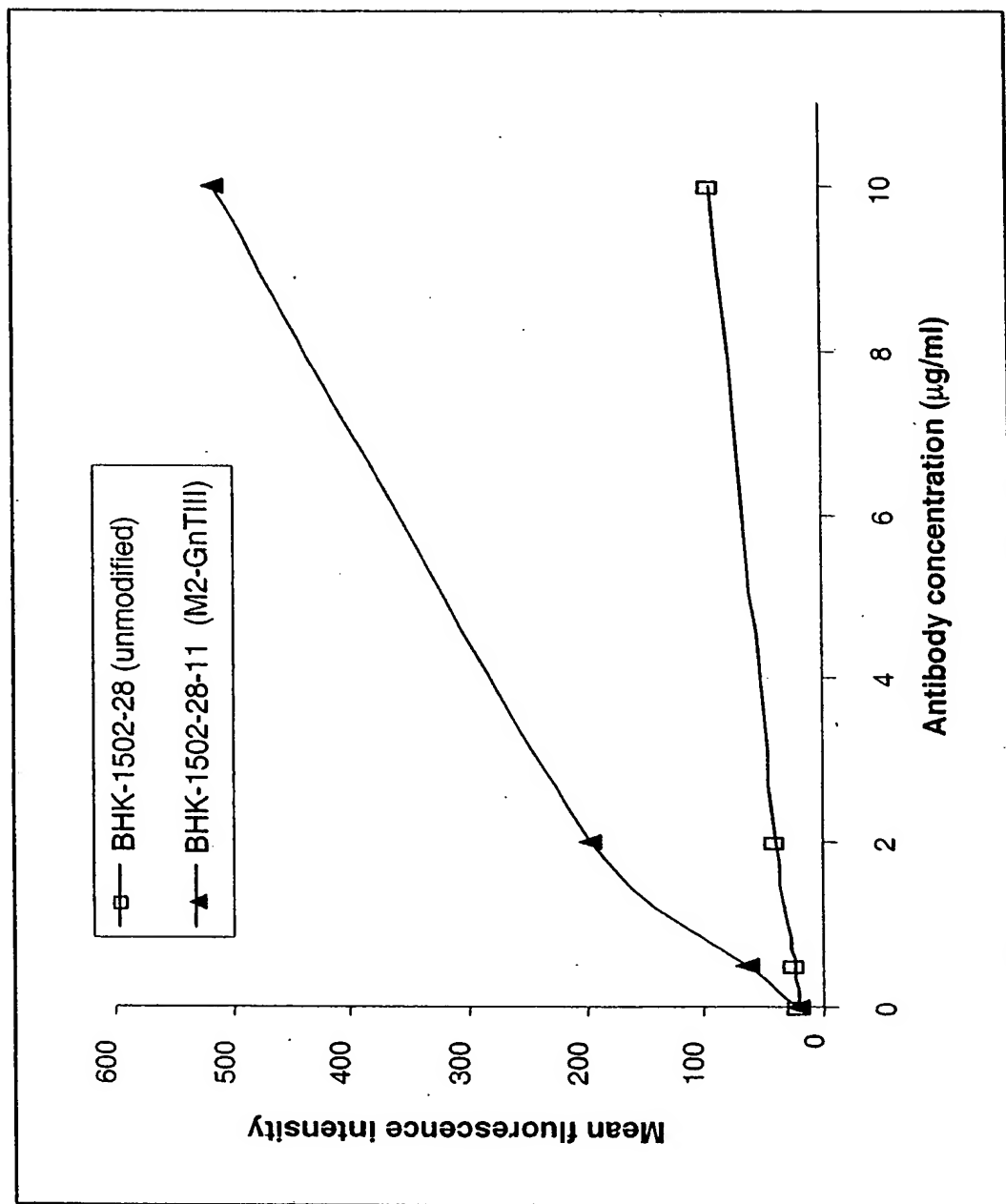


Figure 21

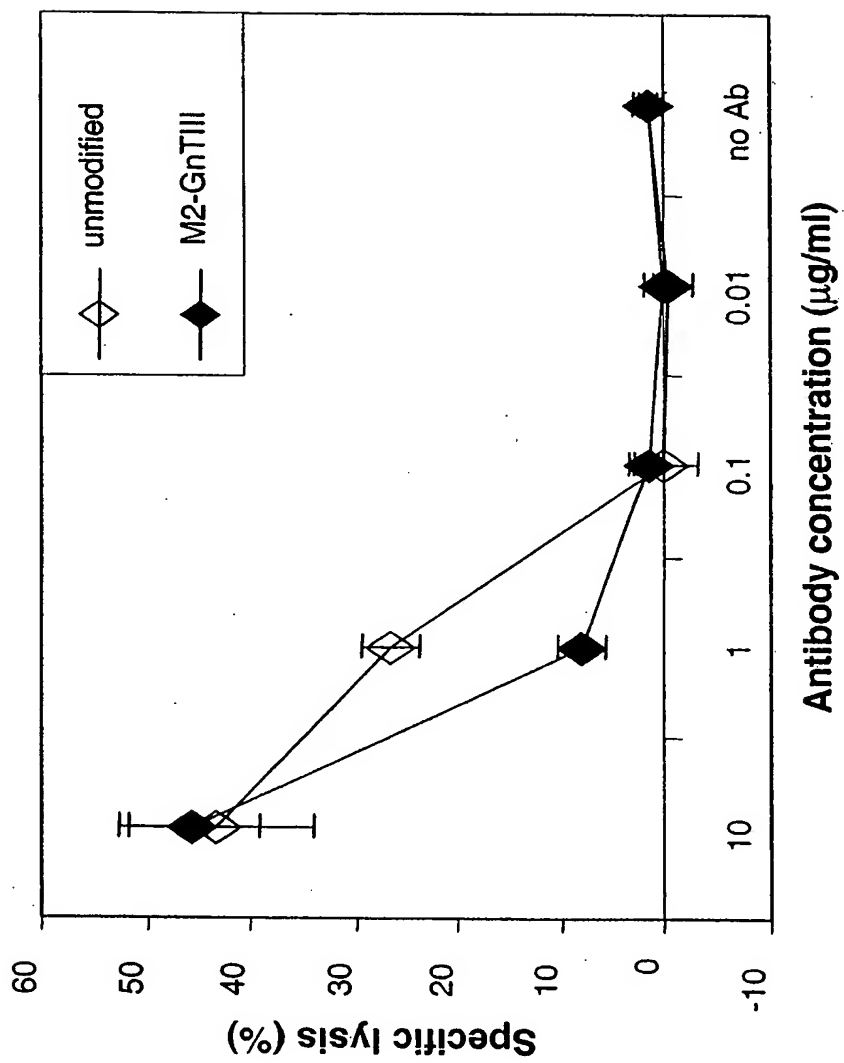


Figure 22

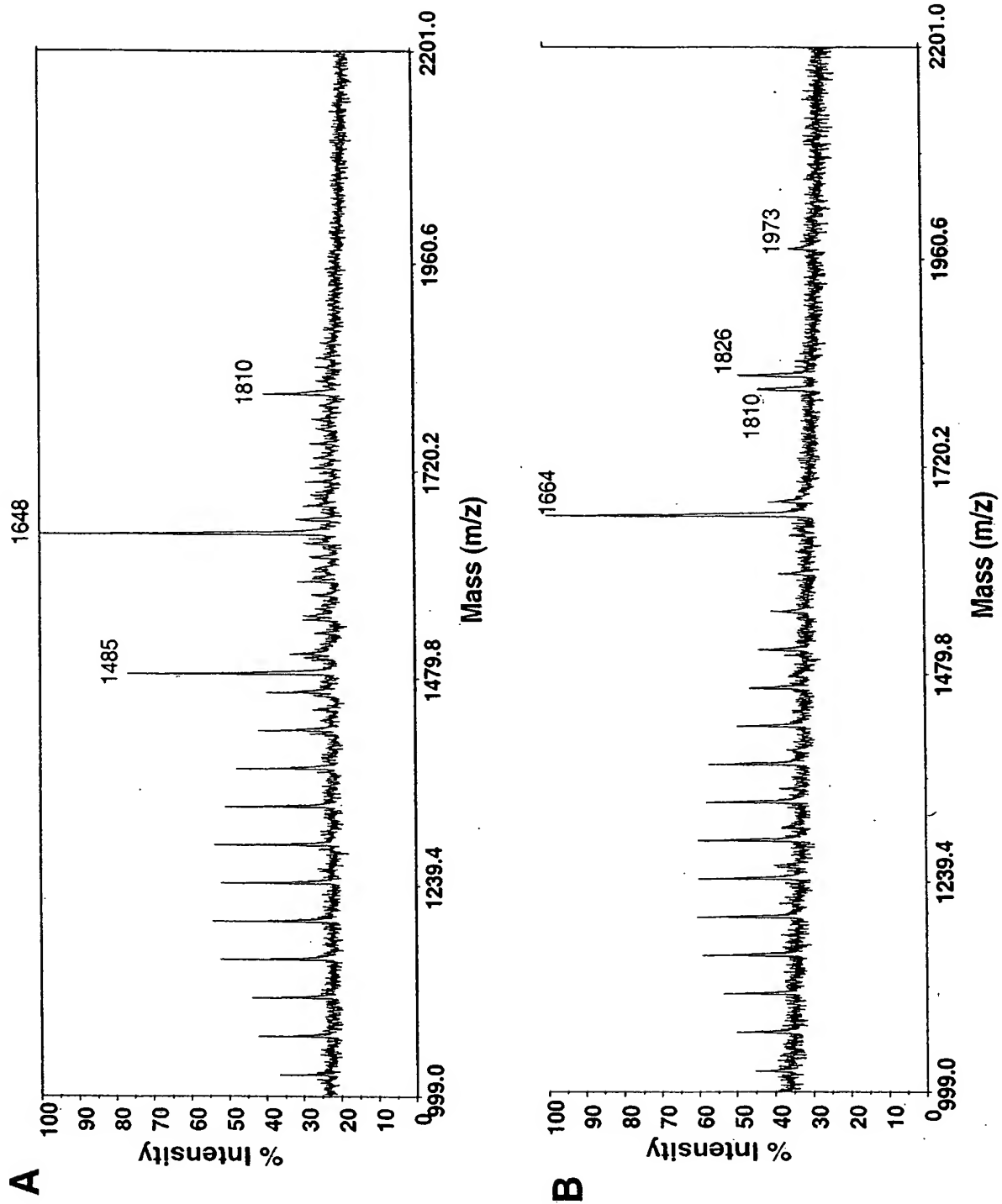
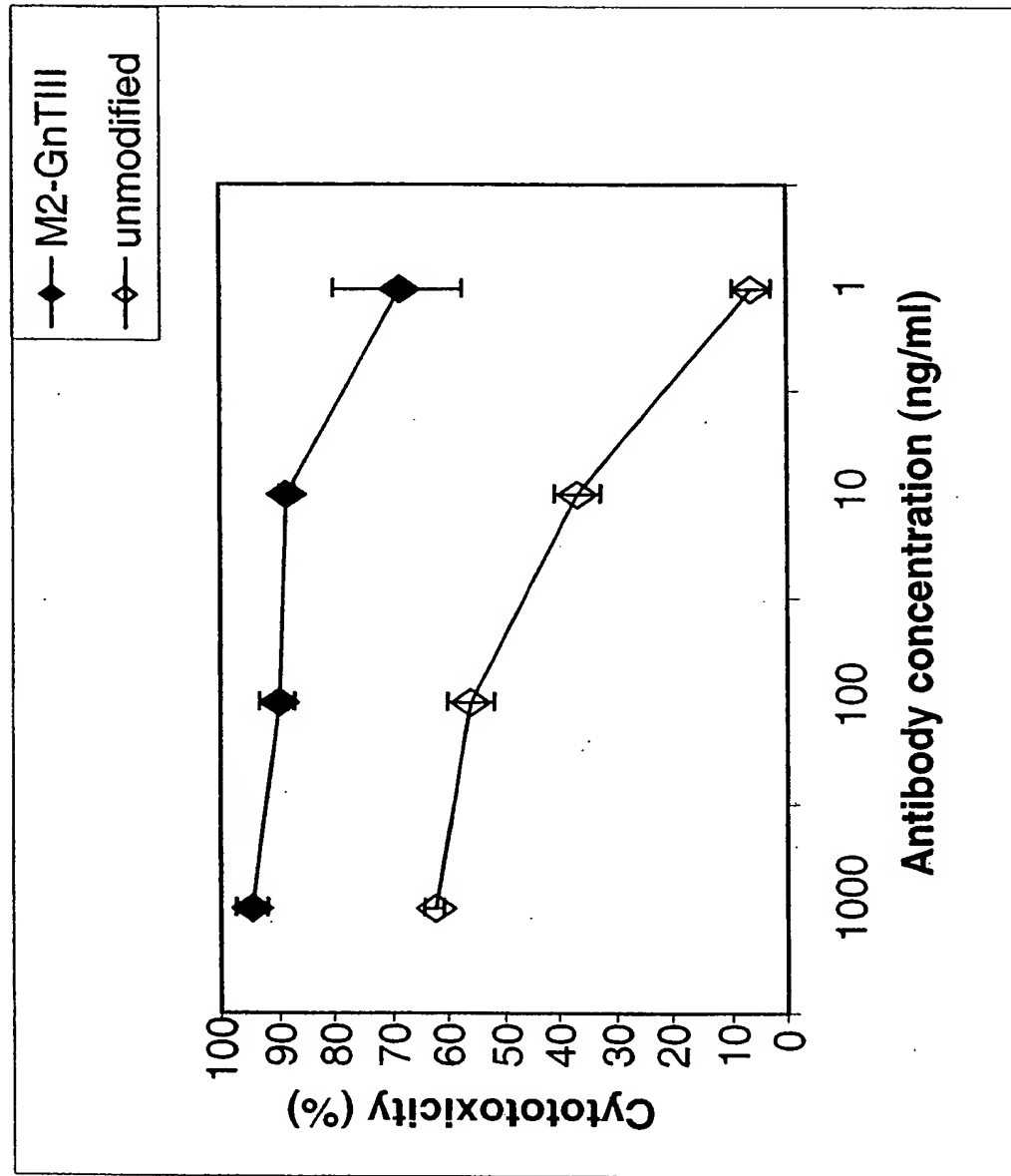


Figure 23



ManII-GnTIII:

Bold: ManII localization domain (cytoplasmic tail + transmembrane region + stem region)

ATGAAGTTAAGCCGCCAGTTCACCGTGTTCCGGCAGTGCGATCTTCTGTGTGGTGATTTTC
TCGCTCTACCTGATGCTGGACCGGGGTCACTTAGACTACCCAGGAACCCGCGCCGCGAG
GGCTCCTTCCCTCAGGGCCAGCTCTCAATGTTGCAAGAAAAATAGACCATTGAGAGCGT
TTGCTAGCTGAGAATAATGAGATCATCTCAAATATTAGAGACTCAGTCATCAATTTGAGT
GAGTCTGTGGAGGATGGTCCGAAAAGTTACAAAGCAATTTAGCCAAAGGTGCTGGCTCA
CCCCTGCTCCAGCCACTGTCCCCTAGCAAGGCCACCGAAGAACTGCACCGGGTGGACTTC
GTGTTGCCGGAGGACACCACAGAGTATTTGTGTGCGACCAAAGCTGGCGGTGTGTGCTTC
AAACCAGGTACCAGGATGCTGGAGAAACCTTCTCCAGGGCGGACAGAGGAGAAGACCAAG
GTGGCTGAGGGGTCTCGGTCCGGGGTCTGCTCGGAGGCCTATGCGGCATGTGTTGAGT
GCACGGGAGCGCTGGGAGGCCGGGGCACTAGGCGCAAGTGGGTGAGTGTGTGTGCCTG
CCAGGCTGGCACGGGGCCAGCTGCGGGGTGCCCACTGTGGTCCAGTATTCCAACCTGCCC
ACCAAGGAGCGCTGGTACCCAGGGAGGTGCCGAGGCGGGTTATCAACGCCATCAACATC
AACCATGAGTTCGACCTGCTGGATGTGCGCTTCCATGAGCTGGGCGATGTTGTGGACGCC
TTTGTGGTCTGCGAATCCAATTTACCCGCTACGGGGAGCCTCGGCCGCTCAAGTTCCGA
GAGATGCTGACCAATGGCACCTTCGAGTACATCCGCCACAAGGTGCTCTACGTCTTCCTG
GACCACTTCCCACCTGGTGGCCGTCAGGACGGCTGGATTGCAGACGACTACCTGCGTACC
TTCTCACCCAGGATGGTGTCTCCCGCCTGCGCAACCTGCGACCTGATGACGTCTTTATC
ATCGACGACGCGGACGAGATCCCTGCGCGTGATGGTGTGCTGTTCTCAAGCTCTACGAT
GGCTGGACAGAGCCCTTCGCCTTCCATATGCGCAAGTCCCTGTATGGTTTCTTTTGGAG
CAACCAGGCACACTGGAGGTGGTGTGAGGCTGCACCATTGACATGCTGCAGGCTGTGTAT
GGGCTGGACGGCATCCGCCTGCGCCGCCGTGAGTACTACACCATGCCCAACTTTTCGACAG
TATGAGAACCGCACCGGCCACATCCTAGTGCAGTGGTCTCTCGGCAGCCCCCTGCACTTC
GCGGGCTGGCACTGCTCCTGGTGTCTCACACCCGAGGGCATCTACTTCAAACCTCGTGTG
GCCCCAGAATGGTGACTTCCCCCGCTGGGGTGACTACGAGGACAAGAGGGACCTCAATTAC
ATCCGAAGCTTGATTGCACTGGGGGATGGTTCGACGGCACGCAGCAGGAGTACCCTCCT
GCAGACCCAGTGAACACATGTATGCTCCTAAGTACCTGCTCAAGAACTATGACCAGTTC
CGTACTTGCTCGAAAATCCCTACCGGGAGCCCAAGAGCACTGTAGAGGGTGGGCGCCGG
AACCAGGGCTCAGACGGAAGGTCATCTGCTGTCAGGGGCAAGTTGGATACAACGGAGGGC
CCGGAACAGAACTGATCTCTGAAGAGGACCTGTAG

MKLSRQFTVFGSAIFCVVIFSLYLMLDRGHLDPNPRREGSFPQGQLSMLQEKIDHLER
LLAENNEIISNIRDSVINLSESVEDGPKSSQSNFSQGAGSPLLQPLSPSKATEELHRVDF
VLPEDTTEYFVVRTKAGGVCFKPGTRMLEKPSPGRTEETKVAEGSSVRGPARRPMPRHVLS
ARERLGGRGTRRKWVECVCLPGWHGPSCGVPTVVQYSNLPTKERLVPREVPRRVINAINI
NHEFDLLDVRFHLDVVDADFVVCESNFTAYGEPRPLKFREMLTNGTFEYIRHKVLYVFL
DHFPFPGGRQDQWIADLYLRTFLTQDGVSRRLNLRPDDVFIIDDADEIPARDGVFLKLYD
GWTEPFAFHMRSYLYGFFWKQPGTLEVVSCTIDMLQAVYGLDGIRLRRRQYYTMPNFRQ
YENRTGHILVQWSLGSPLHFAGWHCSWCFTPEGIYFKLVSAQNGDFPRWGDYEDKRDLY
IRSLIRTGGWFDGTQOEYPPADPSEHMYAPKYLLKNYDQFRYLLNPYREPSTVEGGRR
NQGS DGRSSAVRGKLD TTEGPEQKLISEEDL

Figure 24

GnTI-GnTIII

Bold: GnTI ManII localization domain (cytoplasmic tail + transmembrane region + stem region)

**ATGCTGAAGAAGCAGTCTGCAGGGCTTGTGCTGTGGGGCGCTATCCTCTTTGTGGCCTGG
AATGCCCTGCTGCTCCTCTTCTTCTGGACGCGCCAGCACCTGGCAGGCCACCCTCAGTC
AGCGCTCTCGATGGCGACCCCGCCAGCCTCACCCGGAAGTGATTGCTTGGCCCAAGAC
GCCGAGGTGGAGCTGGAGCGGCAGCGTGGGCTGCTGCAGCAGATCGGGGATGCCCTGTGCG
AGCCAGCGGGGGAGGGTGCCACCCGCGGCCCTCCCGCCAGCCGCGTGTGCCTGTGACC
CCCGCGCCCCCTGCTCCAGCCACTGTCCCCTAGCAAGGCCACCGAAGAACTGCACCGGGTG
GACTTCGTGTTGCCGGAGGACACCACAGAGTATTTTGTGCGCACCAAGCTGGCGGTGTG
TGCTTCAAACCAGGTACCAGGATGCTGGAGAAACCTTCTCCAGGGCGGACAGAGGAGAAG
ACCAAGGTGGCTGAGGGGTCTCGGTCCGGGGTCTGCTCGGAGGCCTATGCGGCATGTG
TTGAGTGCACGGGAGCGCCTGGGAGGCCGGGGCACTAGGCGCAAGTGGGTTGAGTGTGTG
TGCCTGCCAGGCTGGCACGGGCCCAGCTGCGGGGTGCCCACTGTGGTCCAGTATTCCAAC
CTGCCCACCAAGGAGCGCCTGGTACCCAGGGAGGTGCCGAGGCGGGTTATCAACGCCATC
AACATCAACCATGAGTTCGACCTGCTGGATGTGCGCTTCCATGAGCTGGGCGATGTTGTG
GACGCCTTTGTGGTCTGCGAATCCAATTTACCGCCTACGGGGAGCCTCGGCCGCTCAAG
TTCCGAGAGATGCTGACCAATGGCACCTTCGAGTACATCCGCCACAAGGTGCTCTACGTC
TTCCTGGACCACTTCCCACCTGGTGGCCGTCAGGACGGCTGGATTGCAGACGACTACCTG
CGTACCTTCCTCACCCAGGATGGTGTCTCCCGCTGCGCAACCTGCGACCTGATGACGTC
TTTATCATCGACGACGCGGACGAGATCCCTGCGCGTGATGGTGTGCTGTTCTCAAGCTC
TACGATGGCTGGACAGAGCCCTTCGCCTTCCATATGCGCAAGTCCCTGTATGGTTTCTTT
TGGAAGCAACCAGGCACACTGGAGGTGGTGTGAGGCTGCACCATTGACATGCTGCAGGCT
GTGTATGGGCTGGACGGCATCCGCTGCGCCGCCGTGAGTACTACACCATGCCCAACTTT
CGACAGTATGAGAACCGCACCGGCCACATCCTAGTGCAGTGGTCTCTCGGCAGCCCCCTG
CACTTCGCGGGCTGGCACTGCTCCTGGTGTCTCACACCCGAGGGCATCTACTTCAAACCTC
GTGTGCGGCCAGAATGGTGACTTCCCCCGCTGGGGTGACTACGAGGACAAGAGGGACCTC
AATTACATCCGAAGCTTGATTGCACTGGGGGATGGTTCGACGGCACGCAGCAGGAGTAC
CCTCTGCAGACCCCACTGAACACATGTATGCTCCTAAGTACCTGCTCAAGAATATGAC
CAGTTCCGCTACTTGCTCGAAAATCCCTACCGGGAGCCCAAGAGCACTGTAGAGGGTGGG
CGCCGGAACCAGGGCTCAGACGGAAGGTCACTGCTGTCAGGGGCAAGTTGGATACAACG
GAGGGCCCGGAACAGAACTGATCTCTGAAGAGGACCTGTAG**

**MLKKQSAGLVWLWGAIFVAWNALLLFFWTRPAPGRPPSVSALDGDPAASLTREVIRLAQD
AEVELERQRGLLQQIGDALSSQRGRVPTAAPPAQPRVPVTPAPLLQPLSPSKATEELHRV
DFVLPEDTTEYFVRTKAGGVCFKPGTRMLEKPSPGRTEEKTKVAEGSSVRGPARRPMRHV
LSARERLGGRGTRRKWVECVCLPGWHGPSCGVPTVVQYSNLPTKERLVPREVPRRVINAI
NINHEFDLLDVRFHELGDVVDFAFVVCESNFTAYGEPRPLKFREMLTNGTFEYIRHKVLYV
FLDHFPPGGRQDGIADYLRFTLTQDGVSRRLRNLRPDDVFIIDDADEIPARDGVFLKL
YDGWTEPFAFHRKSLYGFQKPGTLEVVSGCTIDMLQAVYGLDGIRLRRRQYYTMPNF
RQYENRTGHILVQWSLGSPLHFAGWHCSWCFTPEGIYFKLVSAQNGDFPRWGDYEDKRD
NYIRSLIRTGGWFDGTQOEYPPADPSEHMYAPKYLLKNYDQFRYLLNPYREPKSTVEGG
RRNQSDGRSSAVRGKLDTEGPEQKLISEEDL**

Figure 25.

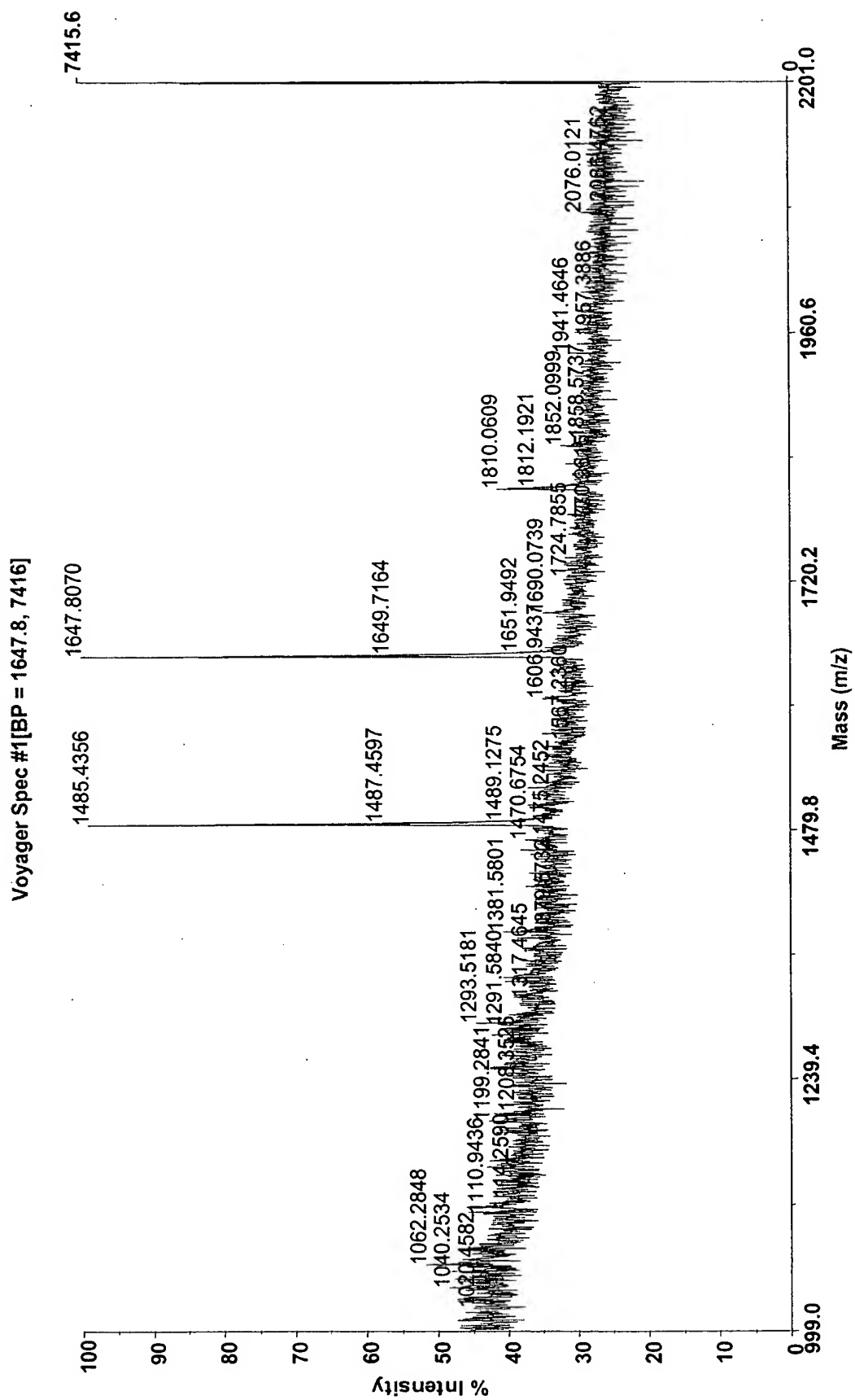


FIG. 26

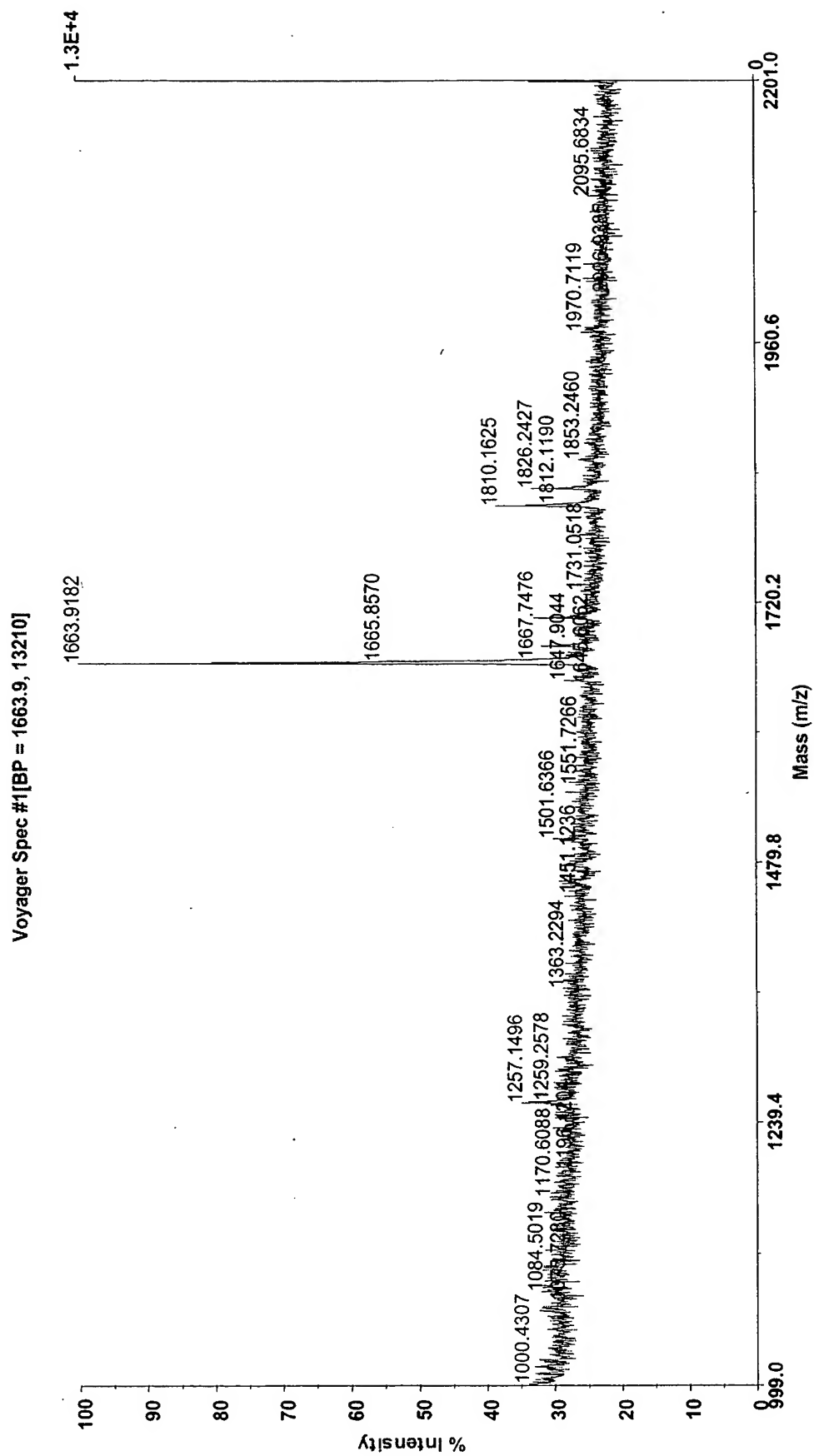


FIG. 27A

Voyager Spec #1[BP = 1460.4, 10880]

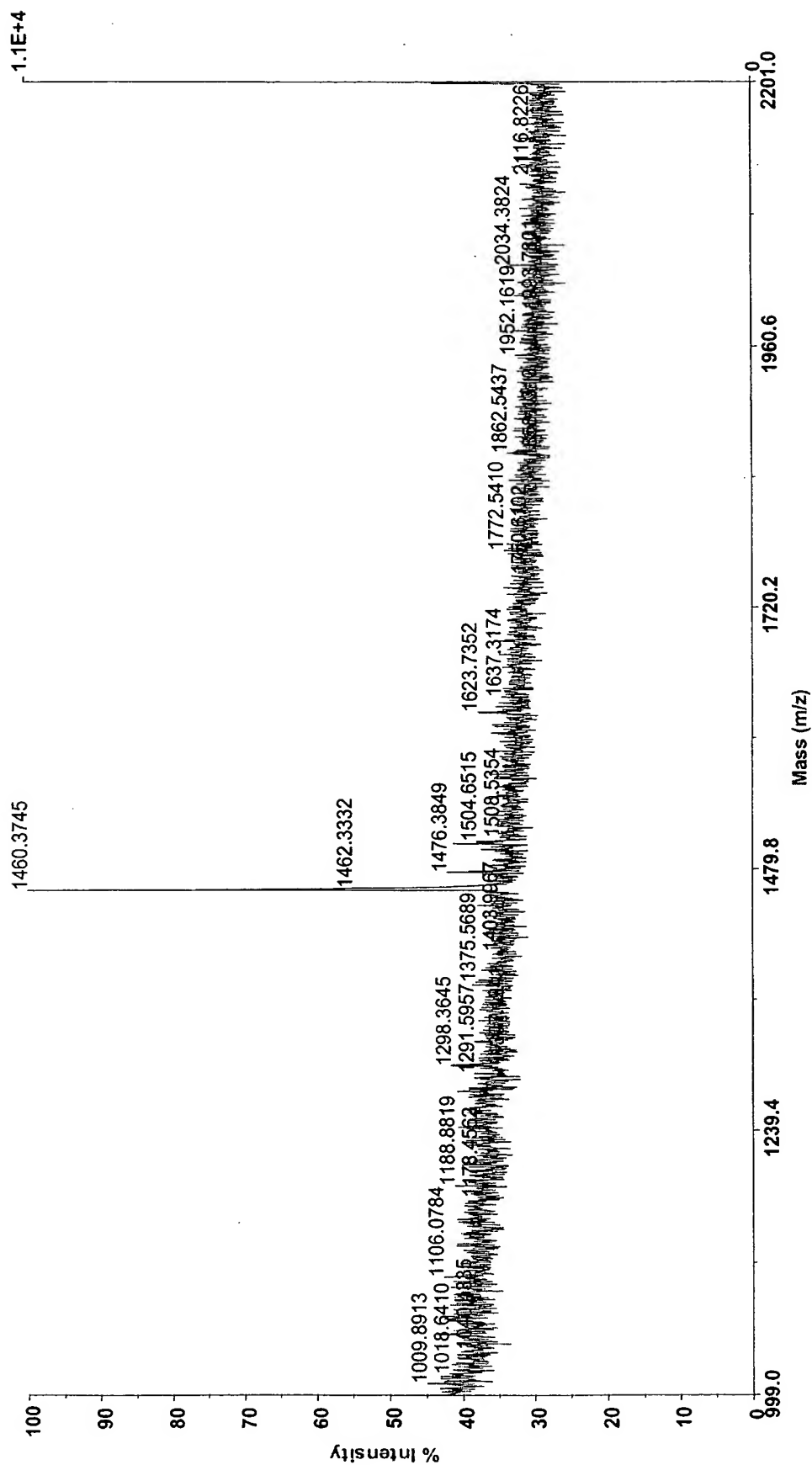


FIG. 27B

Voyager Spec #1[BP = 1542.6, 8192]

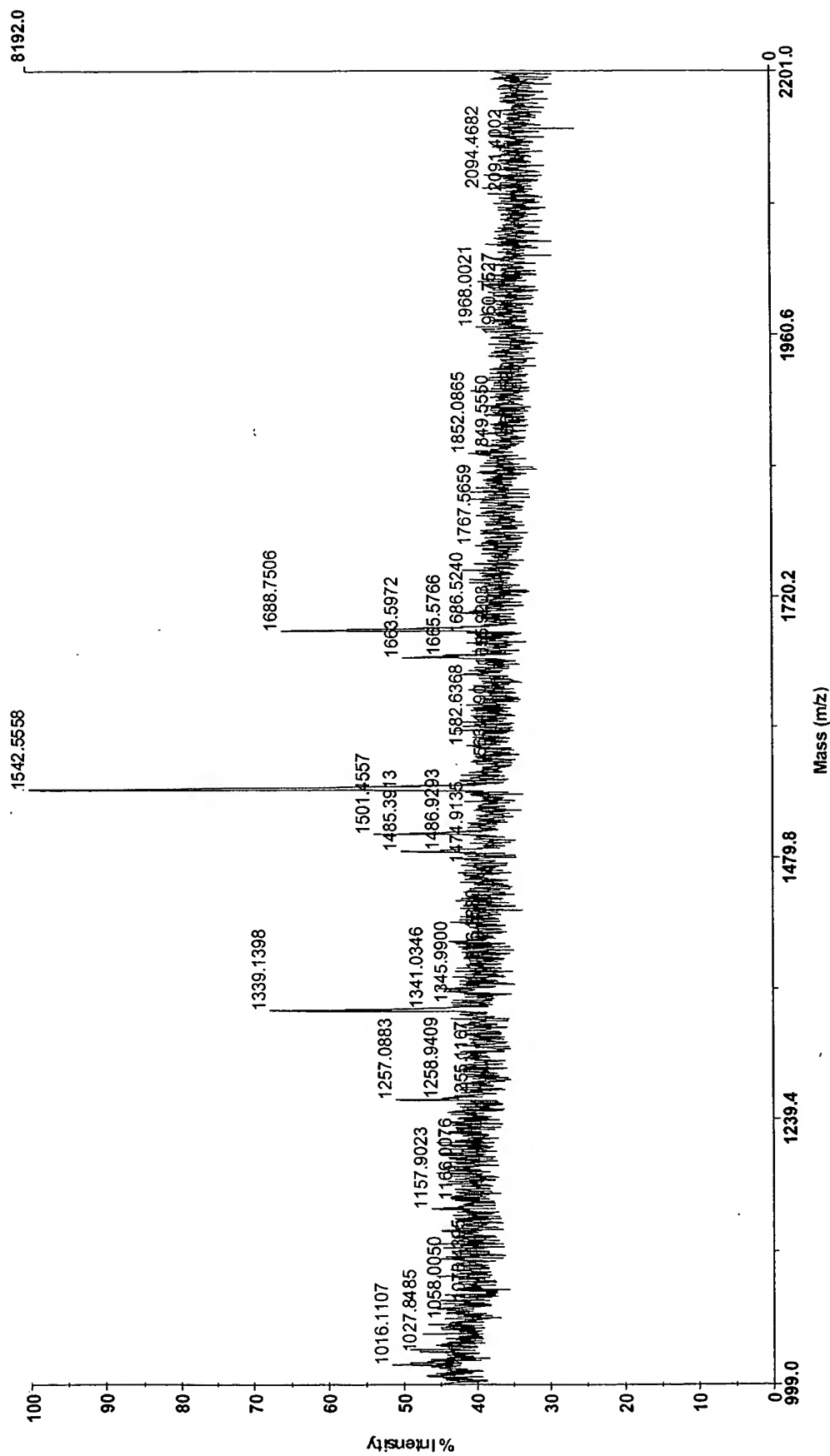


FIG. 28A

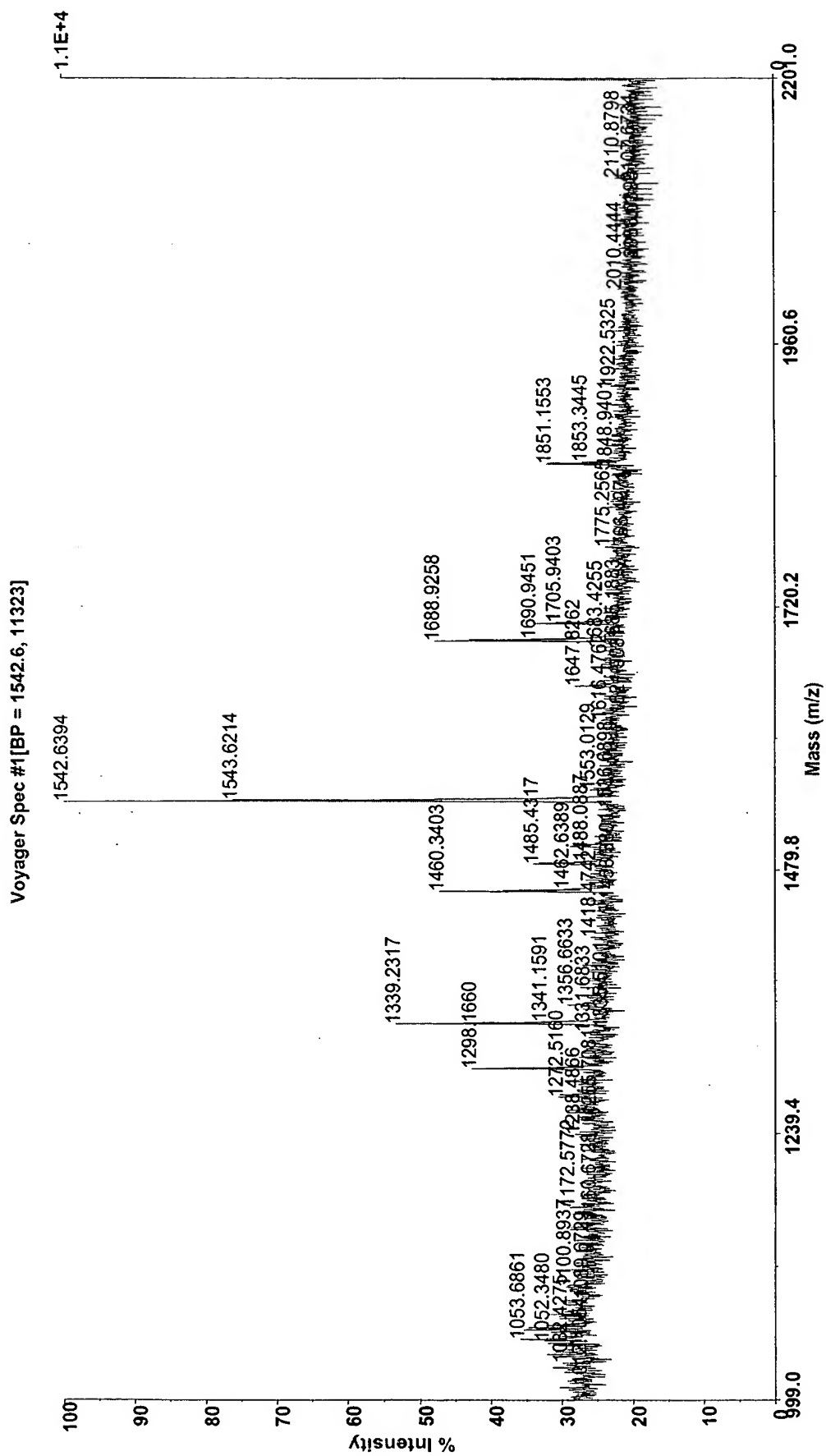


FIG. 28B

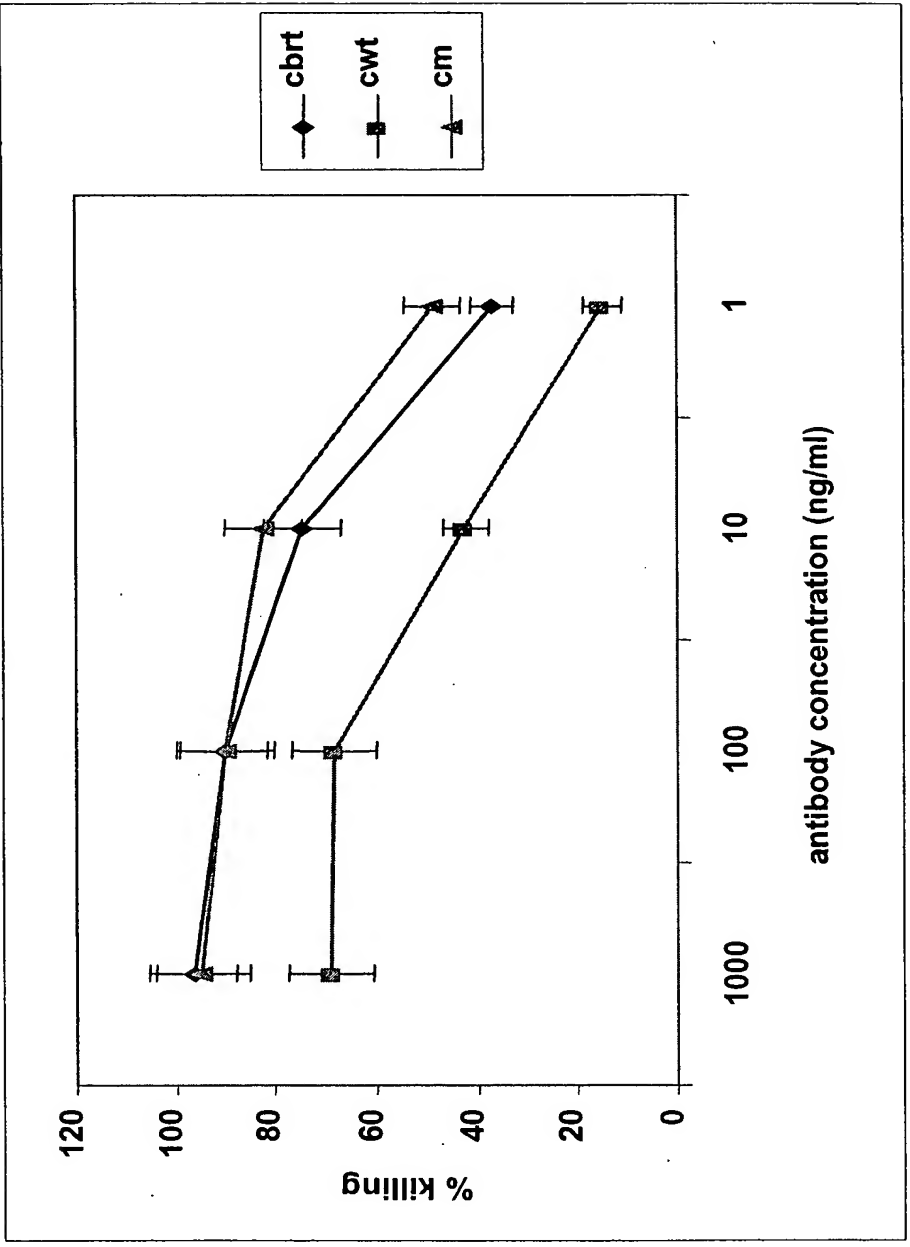


FIG. 29

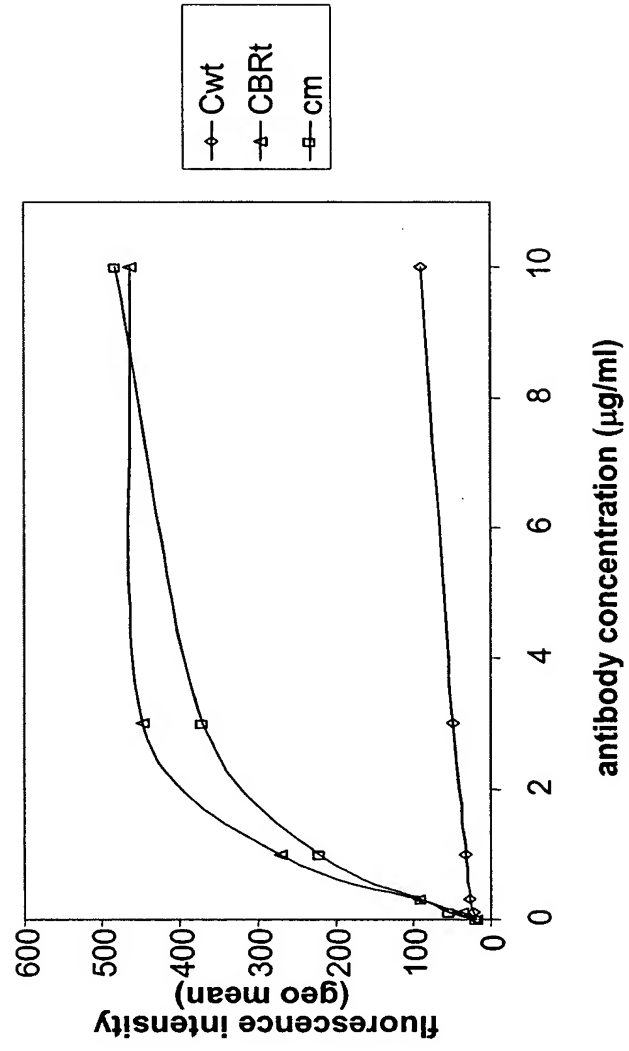


FIG. 30

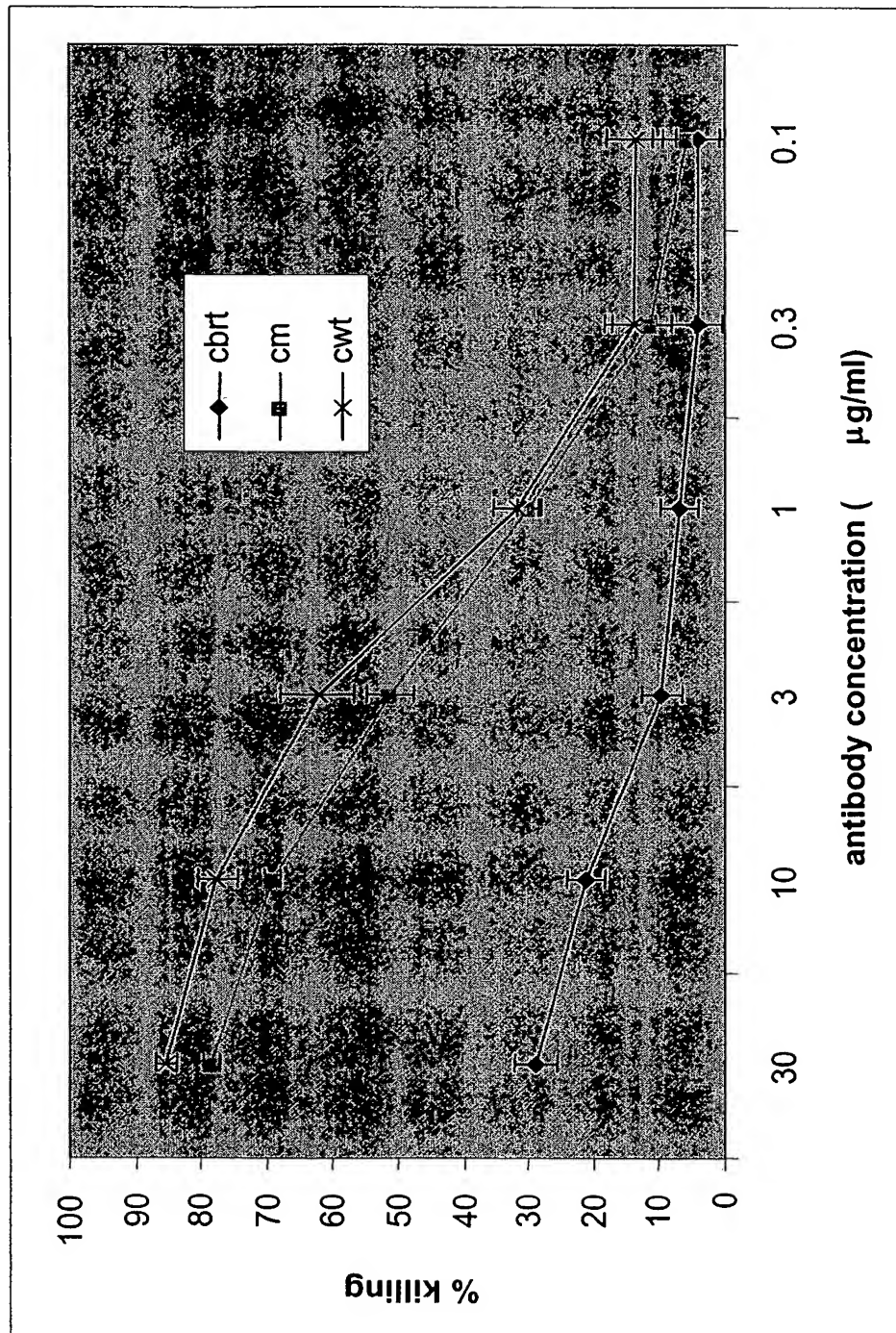


FIG. 31

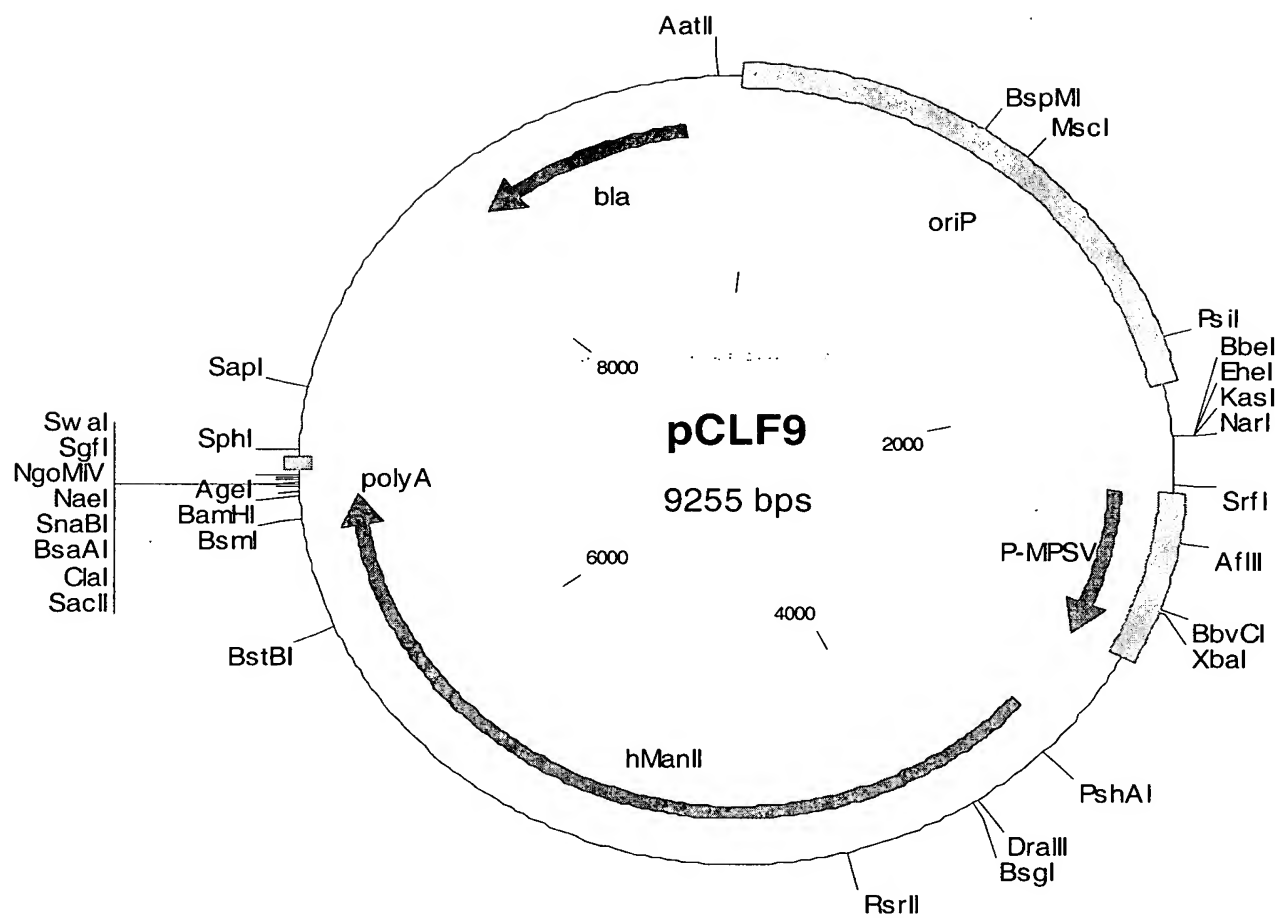


FIG. 32A

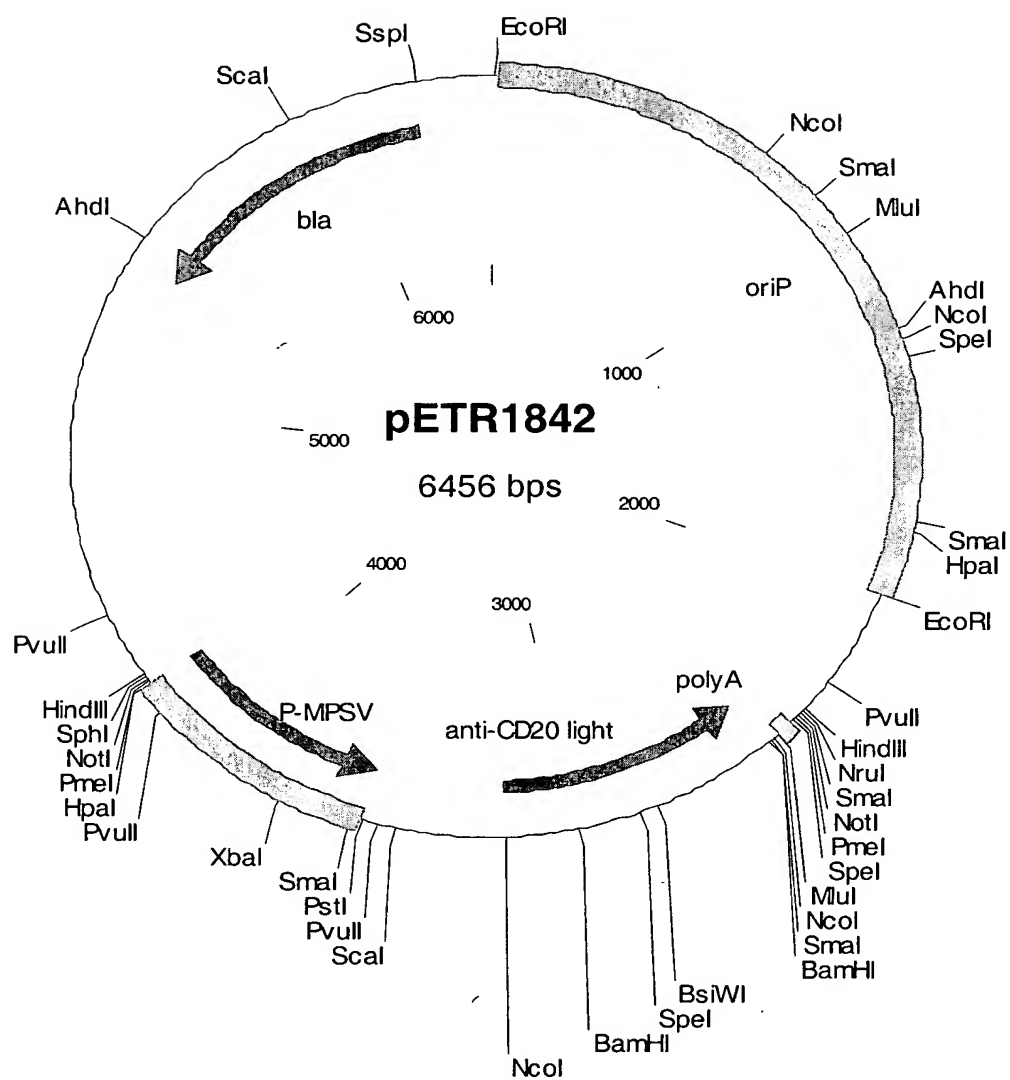


FIG. 32B

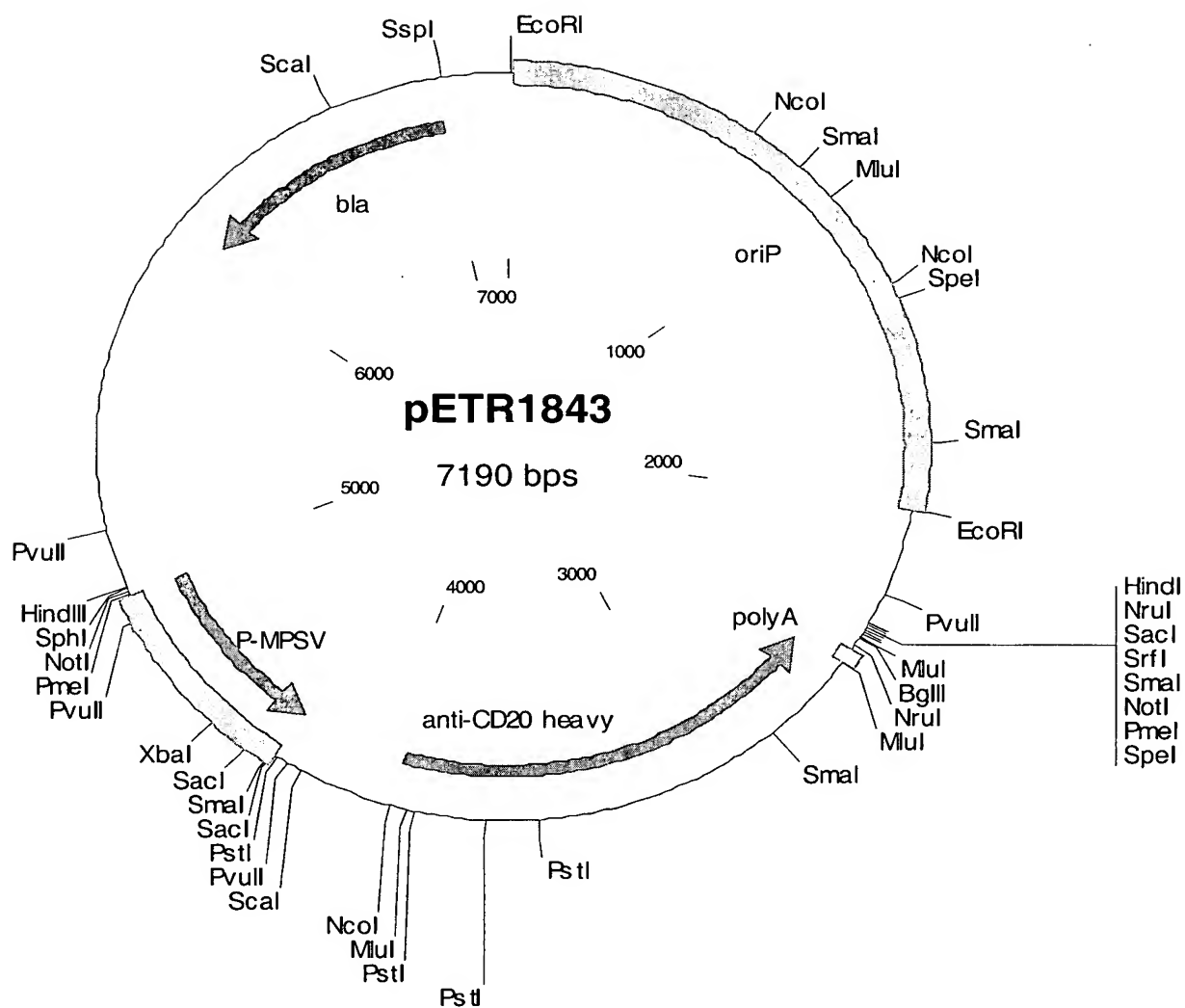


FIG. 32C

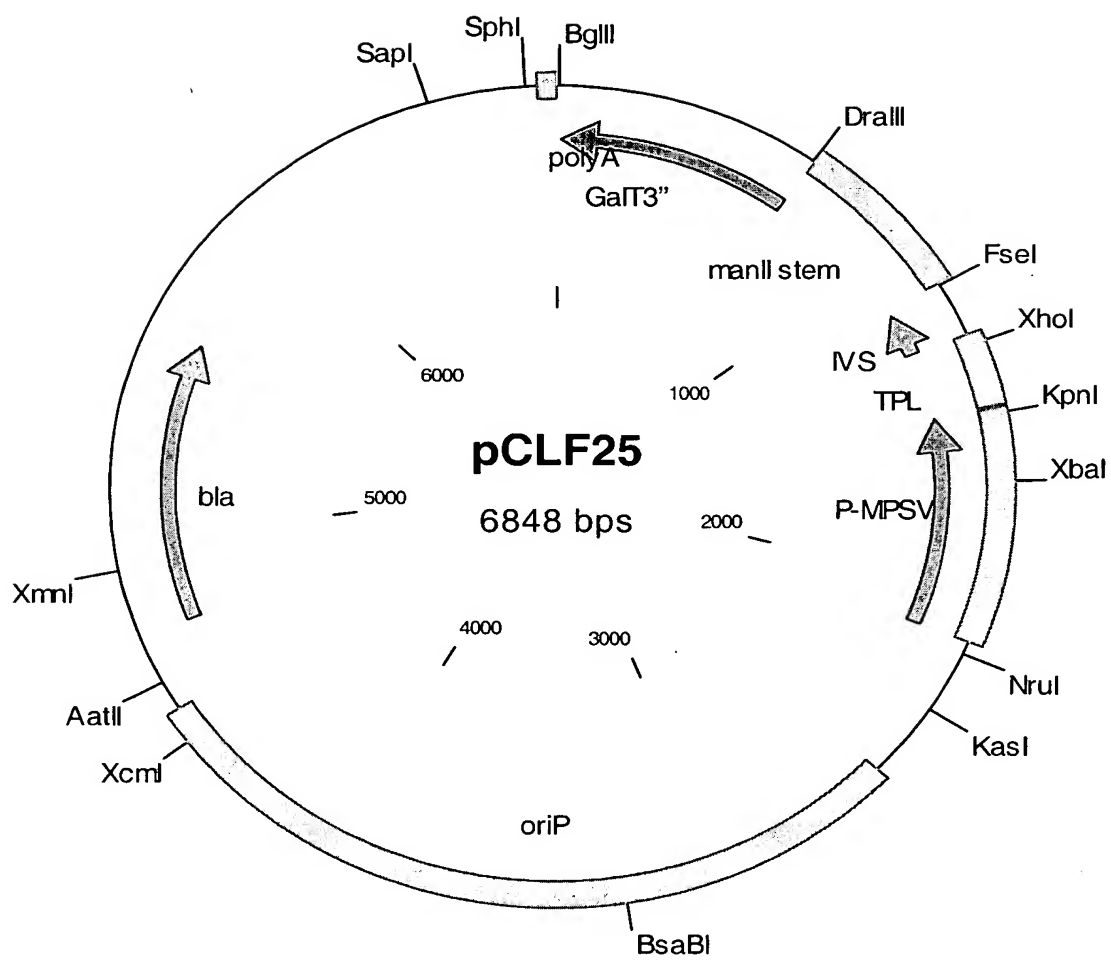


FIG. 33A

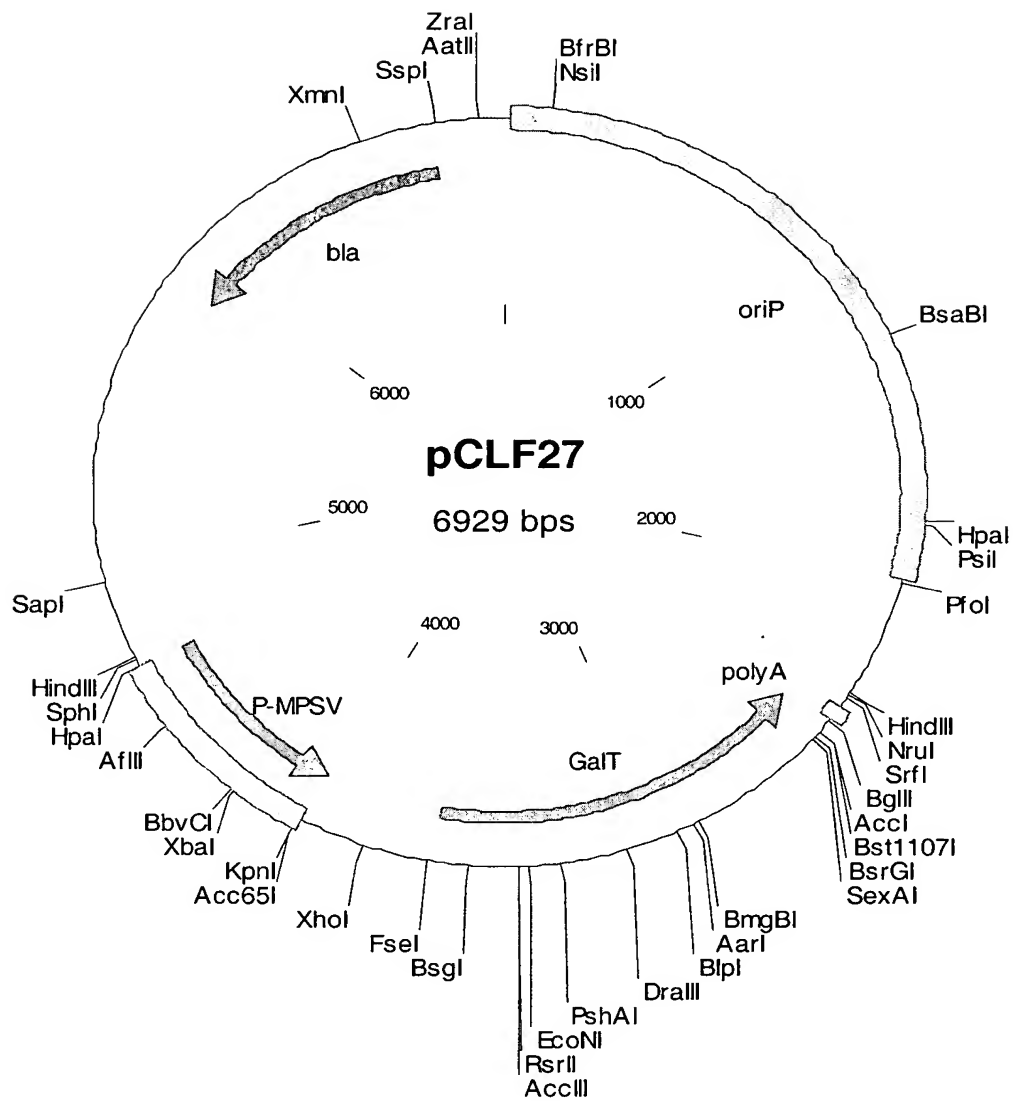


FIG. 33B

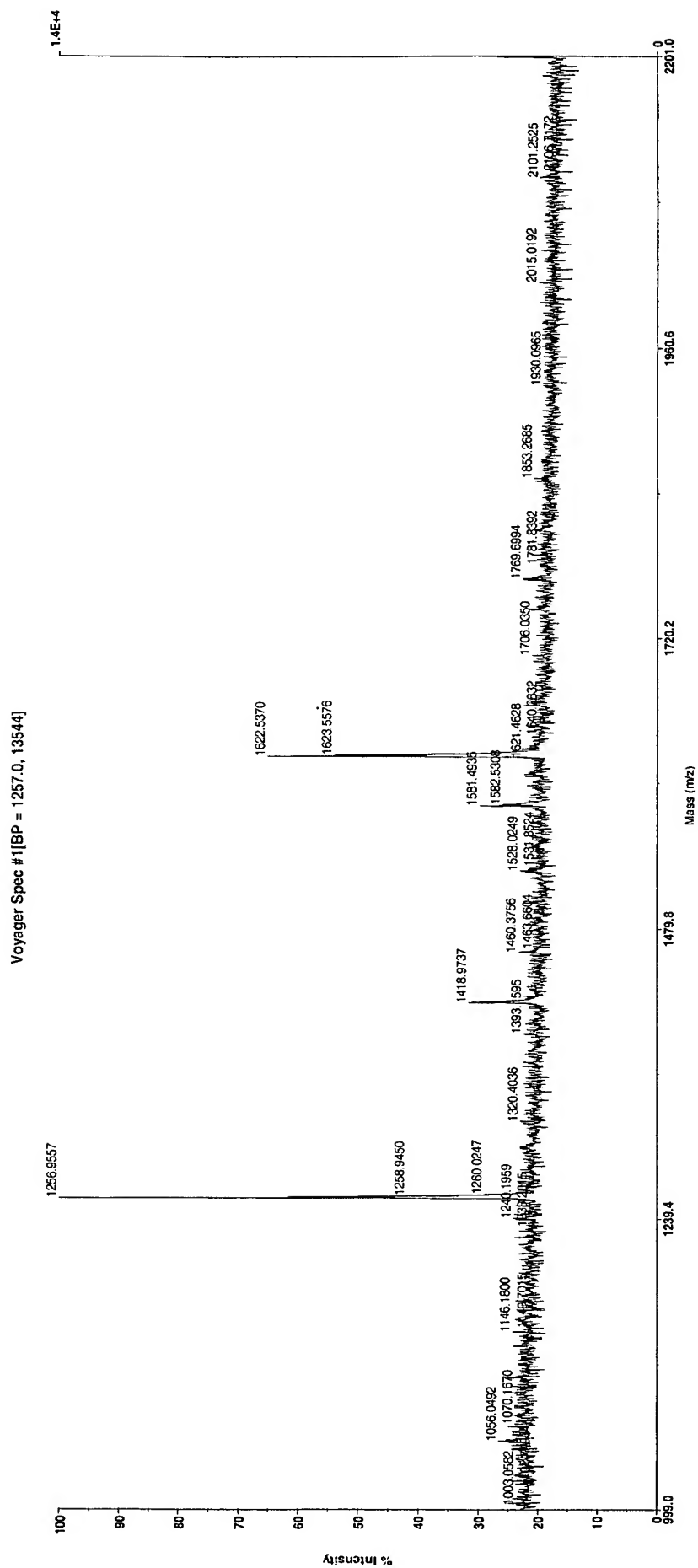
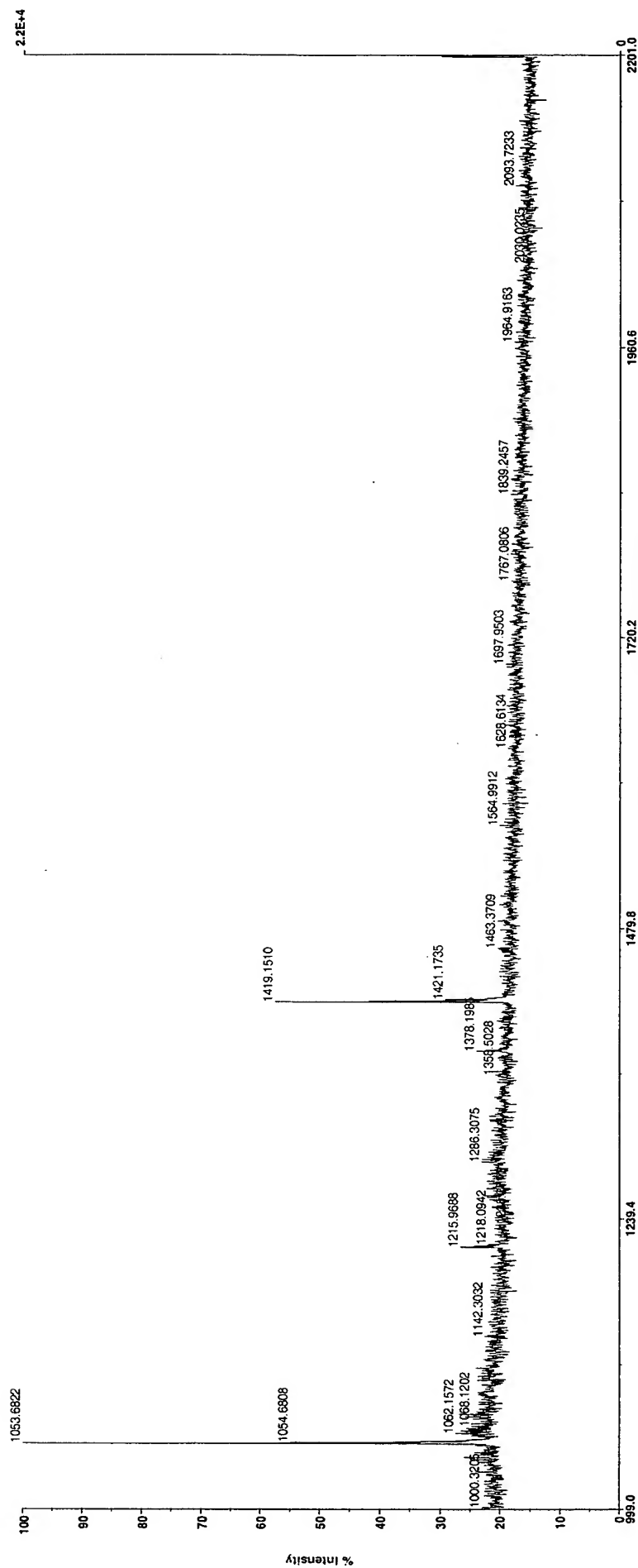


FIG. 35A

Voyager Spec #1[BP = 1053.7, 21948]



	pManII-GaIT	+EndoH
1053		66.50%
1256	51.90%	
1419	8.20%	33.50%
1581	7.00%	
1622	30.00%	
1769	2.90%	
	100.00%	100.00%

FIG. 35B

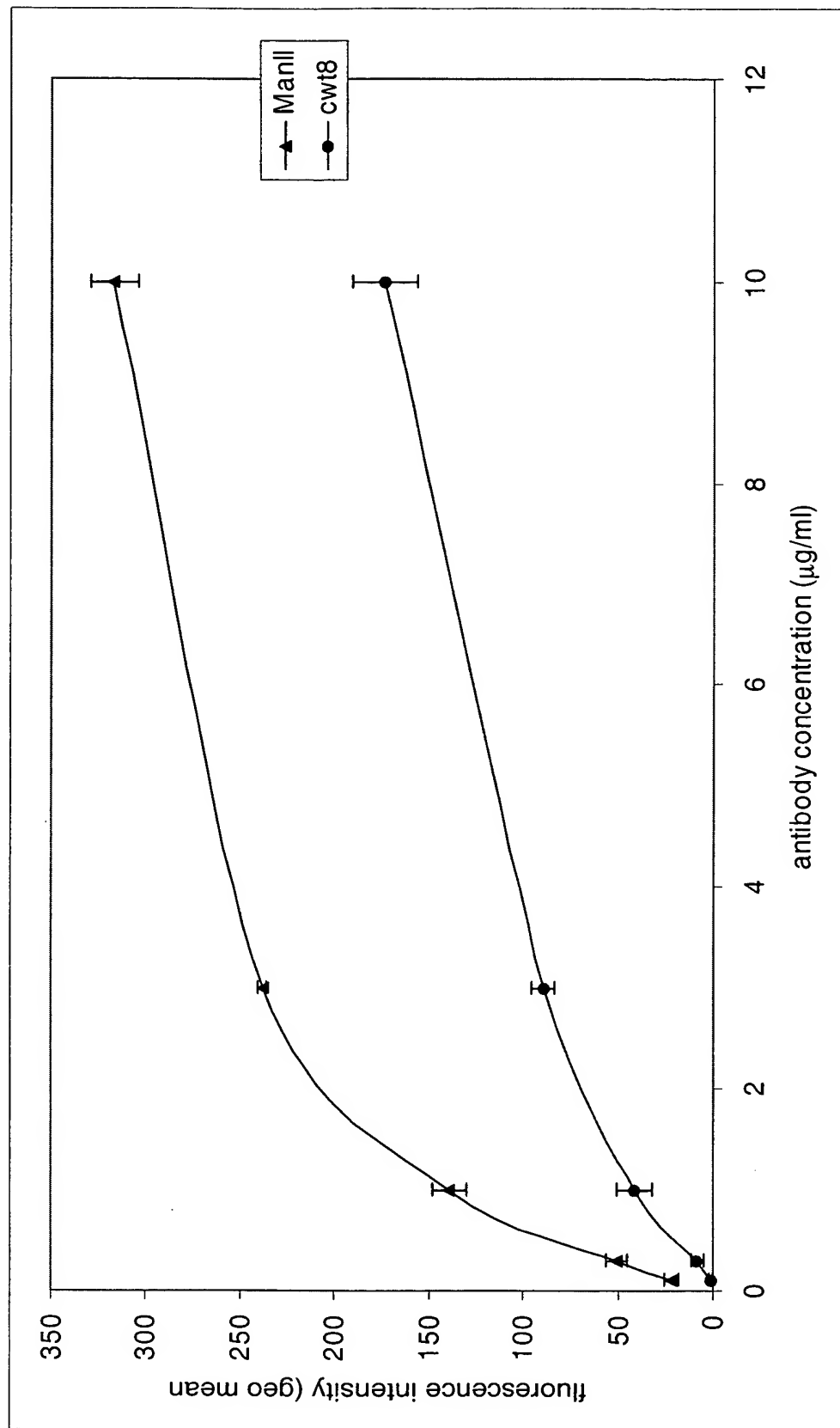


FIG. 36

ADCC mediated by glycoengineered chimeric anti-CD20
IgG1 antibodies against SKW6.4 target cells

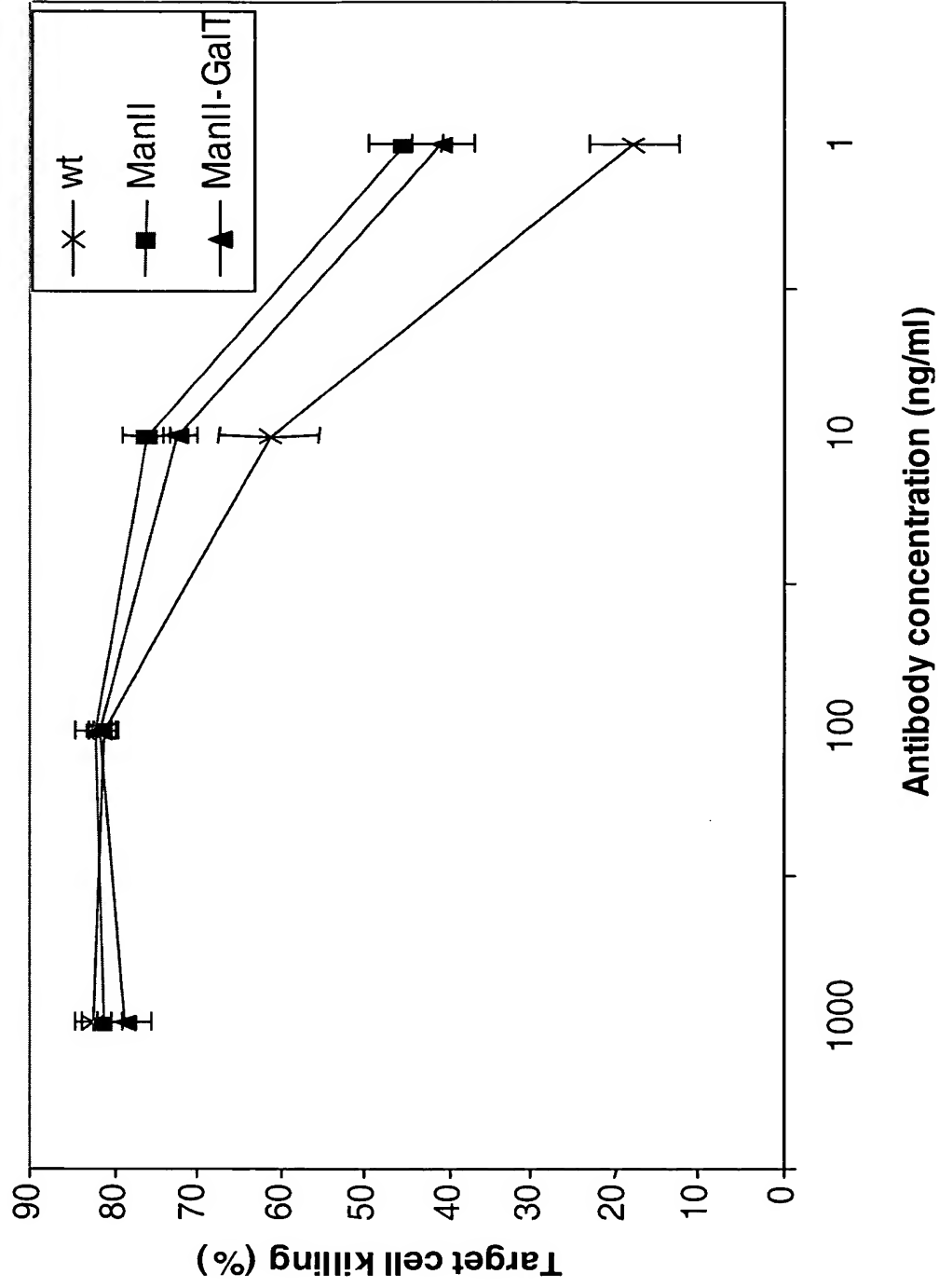


FIG. 37